

20020220.qrp v02_n472.qrl.20020220

Date: Wed, 20 Feb 2002 19:03:08 EST
From: qrp-l@Lehigh.EDU
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: QRP-L digest 2472

QRP-L Digest 2472

Topics covered in this issue include:

- 1) [120377] Re: Radials for Verticals
by "Dave" <wr3i@earthlink.net>
- 2) [120378] Re: A question for "G" stations?
by "Dave" <wr3i@earthlink.net>
- 3) [120379] Re: Butternuts and Wind??
by Bill ROWLETT <kc4atu@yahoo.com>
- 4) [120380] Radial Installation
by "Tom Pennebaker" <n4rs@netpath-rc.net>
- 5) [120381] Planting radials
by "Stuart Rohre" <rohre@arlut.utexas.edu>
- 6) [120382] Re: RV Travels
by "Bruzenak George" <bruzer1@mindspring.com>
- 7) [120383] Planting Radials
by "N3BJ" <alanfryer@email.msn.com>
- 8) [120384] Radials In St. Augustine
by "Pat J. Whelton" <pwhelton@hal-pc.org>
- 9) [120385] My Butternut and Wind
by KKANALZ@prodigy.net
- 10) [120386] Decibels and S units
by "Donny Sirait" <dsirait@centrin.net.id>
- 11) [120387] Re: FYBO Results to come in April--Right?
by QRP Joe <AB7TT@UltralightBackpacker.com>
- 12) [120388] Verticals and Radials
by "tmyers" <tmyers@AcademicPlanet.com>
- 13) [120389] Re: Decibels and S units
by "Gordon Couger" <gcouger@couger.com>
- 14) [120390] Truffle heard but missed
by "Dave" <wr3i@earthlink.net>
- 15) [120391] Re: Truffle heard but missed
by "Bruzenak George" <bruzer1@mindspring.com>
- 16) [120392] Re: Decibels and S units
by "V Cortina" <vcortina@hvc.rr.com>
- 17) [120393] EA6/SP4A0Q
by "WI8W" <wi8w@arrl.net>
- 18) [120394] S-meters, units and dB
by Bob Mason <skydive@usa.net>
- 19) [120395] Re: S-meters, units and dB

by "V Cortina" <vcortina@hvc.rr.com>
20) [120396] Re: EA6/SP4A0Q
by "John Paul Keon" <jpkeon@nc.rr.com>
21) [120397] Re: EA6/SP4A0Q
by "John Paul Keon" <jpkeon@nc.rr.com>
22) [120398] Cub fox on 7048.9 @ 3:21Z
by "Mike WA8BXN" <hubby2k@hotmail.com>
23) [120399] Re: Radials for Verticals
by "James R. Duffey" <jamesd1@flash.net>
24) [120400] What good is ONE measley milliwatt?
by Paul Stroud <aa4xx@ipass.net>
25) [120401] Re: EA6/SP4A0Q
by David Gauding <david.gauding@bbs.galilei.com>
26) [120402] NOT TRUFFLE LOG YET
by RLemmel@aol.com
27) [120403] FOX announce NORC Thu nite US time
by "Rod NORC" <rod@n0rc.com>
28) [120404] Re: S-meters, units and dB [precisely right]
by Chuck Carpenter <w5usj@9plus.net>
29) [120405] Cub Fox?
by "Trevor Jacobs" <fxtech@earthlink.net>
30) [120406] TRUFFLE LOG 02-19-02
by RLemmel@aol.com
31) [120407] Last Night with the Tiny Tornado on 40
by Jack WsixABC <w6abc@yahoo.com>
32) [120408] Fox: Cub Fox Spot
by "Karl F. Larsen" <k5di@zianet.com>
33) [120409] Re: Cub Fox?
by "Karl F. Larsen" <k5di@zianet.com>
34) [120410] RE: Decibels and S units
by Nick Kennedy <nkennedy@tcainternet.com>
35) [120411] subject line vs DELETE
by K5BDZ@aol.com
36) [120412] Re: Decibels and S units
by "W2WU" <w2wurjj@verizon.net>
37) [120413] K0ZK in Maine looking for a ride to Atlanticon
by "George Heron N2APB" <n2apb@erols.com>
38) [120414] FOX: Cub Fox N0IT
by Dave Sjolin <sjolin@swbell.net>
39) [120415] WTB: Ted Hart's book
by Michael Goins <mgoins@usa.net>
40) [120416] A little late--but I thought I'd ask....
by "Alan Kaul" <alan.kaul@worldnet.att.net>
41) [120417] Warber Kits now ordered through Small Wonder Labs
by "George Heron N2APB" <n2apb@erols.com>
42) [120418] Revised AA4XX 30M Beacon Sked Wednes-Thurs
by Paul Stroud <aa4xx@ipass.net>
43) [120419] Re: More late breaking news on the TDA1072 AM rx chip

- by Dan Puckett <wd8aau@woh.rr.com>
- 44) [120420] PWOT on 30m
by "Adrian Weiss" <aweiss@usd.edu>
- 45) [120421] Decibels and S units - yeeep
by "Charles Mabbott" <aa8vs@msn.com>
- 46) [120422] Re: Broadcast Band Verticals
by Ray Sills <raysills@1stconnect.com>
- 47) [120423] Re: FOX: Cub Fox N0IT
by Tim ORourke <TORourke@KaiserFT.com>
- 48) [120424] QRP Mini-Tuner
by "Karl F. Larsen" <k5di@zianet.com>
- 49) [120425] Cebik's book still available from ARCI??
by G Brandon Hoyt <preacher102677@juno.com>
- 50) [120426] Re: Cebik's book still available from ARCI??
by Hank Kohl K8DD <k8dd@arrl.net>
- 51) [120427] Freidrichshafen dates?
by K5BDZ@aol.com
- 52) [120428] FOX: 2/21/2002 US TIME N1QO Fox Announcement
by John Wagner <john@wagner-usa.net>
- 53) [120429] QRP Homebrewer #7
by David Gauding <david.gauding@bbs.galilei.com>
- 54) [120430] Book available!
by G Brandon Hoyt <preacher102677@juno.com>
- 55) [120431] conditioning
by Wes Clopton <W3ERU@DRIX.NET>
- 56) [120432] [Mni Tnx] Butternuts and Wind ?s
by Chuck Carpenter <w5usj@9plus.net>
- 57) [120433] conditioning - approach
by "Charles Mabbott" <aa8vs@msn.com>
- 58) [120434] RE:conditioning - approach
by Goran Hosinsky <hosinsky@royac.iac.es>
- 59) [120435] Re: conditioning - approach
by David Hinerman <WD8CIV@worldnet.att.net>
- 60) [120436] Re: PVC Mast
by George Gingell <k3tks@u1.abs.net>
- 61) [120437] 10m is open for business
by "Rod N0RC" <rod@n0rc.com>
- 62) [120438] S-Unit Table/Info
by "Paul Harden, NA5N" <na5n@rt66.com>
- 63) [120439] Opps Decibels and S units
by "Donny Sirait" <dsirait@centrin.net.id>
- 64) [120440] QRP
by K5KW@aol.com
- 65) [120441] Re: Opps Decibels and S units
by Chuck Carpenter <w5usj@9plus.net>
- 66) [120442] TRF4400 single chip xmitter
by Steven Weber <kd1jv@moose.ncia.net>
- 67) [120443] Re: Opps Decibels and S units

- by "V Cortina" <vcortina@hvc.rr.com>
- 68) [120444] Paul Harden
by "Doug Hendricks" <ki6ds@dph.dpol.net>
- 69) [120445] Re: Opps Decibels and S units
by "George, W5YR" <w5yr@att.net>
- 70) [120446] Re: Opps Decibels and S units
by "Bruzenak George" <bruzer1@mindspring.com>
- 71) [120447] For Sale: K1 with options
by Paul Womble <pwomble1@tampabay.rr.com>
- 72) [120448] Re: S-Unit Table/Info
by "Alan Kaul" <alan.kaul@worldnet.att.net>
- 73) [120449] Re: S-Unit Table/Info
by William R Colbert <w5xe@juno.com>
- 74) [120450] Correction to: Opps Decibels and S units
by "W2WU" <w2wurjj@verizon.net>
- 75) [120451] Re: S-Unit Table/Info
by "Tony Fishpool" <tony@g4wif.fsnet.co.uk>
- 76) [120452] ARRL DX contest pins
by "Jim N0UR" <n0ur@attbi.com>
- 77) [120453] Re: ARRL DX contest pins
by Wes Clopton <W3ERU@DRIX.NET>
- 78) [120454] S-Unit Table/Info (fwd)
by "Paul Harden, NA5N" <na5n@rt66.com>
- 79) [120455] RE: conditioning - approach
by "Tracy Markham" <tracy@bytemark.com>
- 80) [120456] FOX: PRELIMINARY LOG - CUB FOX N0IT
by Dave Sjolin <sjolin@swbell.net>
- 81) [120457] Re: conditioning - approach
by "KD3PC" <kd3pc@mindspring.com>
- 82) [120458] Star Studded QST for April
by "Bill Jones" <kd7s@psnw.com>
- 83) [120459] Kudo's to CQC/CO2KK
by "Paul Harden, NA5N" <na5n@rt66.com>
- 84) [120460] RE: [CQCLIST] Kudo's to CQC/CO2KK
by "Mugleston, Brad" <brad.mugleston@gwl.com>
- 85) [120461] FOX N0RC request [HUMOR]
by "Rod N0RC" <rod@n0rc.com>
- 86) [120462] Re: conditioning - approach
by "George, W5YR" <w5yr@att.net>
- 87) [120463] Re: Star Studded QST for April
by "Bill Jones" <kd7s@psnw.com>
- 88) [120464] FS Sierra / tt1340
by N4SKS@cs.com
- 89) [120465] Re: FOX N0RC request [HUMOR]
by Chris Cartwright <ccart@phideaux.com>
- 90) [120466] Re: Opps Decibels and S units
by Bruce Muscolino <w6toy@erols.com>
- 91) [120467] Re: conditioning - approach

by aa3ur@comcast.net

Date: Tue, 19 Feb 2002 18:42:02 -0500
From: "Dave" <wr3i@earthlink.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>, kb1ckt@yahoo.com
Subject: [120377] Re: Radials for Verticals
Message-ID: <3C729C7A.25097.23A271@localhost>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT
Content-description: Mail message body

Shawn,

I am sure my reply is going to open a can of worms but using My KISS method of antenna work I will try to answer some of you questions.

first the 10 foot helical you built If the helical is the correct length then a 5' fence post hammer into the ground will be enough to resonate I would start with the fence post then adjust the antenna length to match a top hat will help if you are restricted to height. second the ham stick you would be able to get the stick to work but as all helicals are a compromise then of corse the ham stick is the worst of the two!

personally I would put up the tallest straight conductor I could and then add sufficient area of top hat the bring it to resonance

Regards

Dave W1QB

Date: Tue, 19 Feb 2002 18:15:20 -0500
From: "Dave" <wr3i@earthlink.net>
To: <wr3i@earthlink.net>, "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [120378] Re: A question for "G" stations?
Message-ID: <3C729638.12606.B308A@localhost>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT
Content-description: Mail message body

Bob, Thanks That is just the description I was looking for! As I remember a reasonable performance of mine about (blah Blah) years ago

Thanks
Dave W1QB

Date: Tue, 19 Feb 2002 16:12:16 -0800 (PST)
From: Bill ROWLETT <kc4atu@yahoo.com>
To: w5usj@9plus.net,
Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [120379] Re: Butternuts and Wind??
Message-ID: <20020220001216.99959.qmail@web14206.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

I would think that just from a maintenance standpoint
I would install guys on any vertical which was more
than 15ft in length. Way take a chance on having to
replace bent tubing. The small outlay for the guys is
offset by the added resistance to the affects of wind
and the piece of mind knowing that you have done
everything you can to protect your antenna.

73, Bill kc4atu

Do You Yahoo!?
Yahoo! Sports - Coverage of the 2002 Olympic Games
<http://sports.yahoo.com>

Date: Tue, 19 Feb 2002 19:28:49 -0500
From: "Tom Pennebaker" <n4rs@netpath-rc.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [120380] Radial Installation
Message-ID: <008901c1b9a5\$9369a040\$422a1bce@pavilion>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I'm rather reluctant to post anything on this newsgroup. Someone always has
to have the last word or belittle you, find fault or whatever and I don't
have the thick skin for it.....here is an excerpt of what I sent to Roy in
hopes it will answer many of the questions I'm receiving....

I started by hiring a neighbor that had a Ford tractor with a
roto-tiller on the back. About 5 feet wide. Waited for a dry spell, then had

the roto-tiller pulverize the ground. It was like powder when finished. Then I strung out each radial, just laid them on top of the ground. Next I took an old push garden plow, took the plow off and fashioned a piece of 1/8 pipe into an "S" shape. The top of the "S" pointed forward, the bottom pointed to the rear. The bottom was placed about the same depth as the plow. I strung the radial through the pipe, pushed down so the wire was a couple inches in the dirt and started walking. When I got to the end of each wire, each was all laid and out of sight. For me it was a stroke of genius. I had tried numerous times to lay radials, even used an air jack hammer one time! The vertical is a little over 80 feet tall and the 90 radials are the same length.

The performance of the vertical is awesome!! I have a 160 meter loop and use it most of the time. The loop is a great performer and "Very" quiet. The vertical is quite noisy. When I absolutely have to make contact the vertical will pull me through where nothing else will. It is extremely responsive to low angle signals. Much more so than the loop.

I have 21 ten foot ground rods at the base of the vertical, dispersed like spokes on a wheel. I have seen lightning hit several times, it is absolutely awesome!! It's rather odd, most of the time when lightning hits it is extremely loud and seems to splatter everywhere, not so with the vertical. It is a very short, clean, strike, not near as loud. Like the vertical is a sponge and soak's it all up. I use 2/0 copper for the spark gaps. The 2/0 is tied into the ground rod system. I feed the vertical with cablevision hard line.

Hope this has helped. By the way I wasn't married at the time so didn't have to argue with an xyl on tearing the yard up. My 25 year marriage had just gone down the tubes, so I bought 32 acres and planted myself right in the middle of it. My drive way is 1 mile from the mail box to the front door....life is good back here....Tom N4RS

Date: Tue, 19 Feb 2002 18:50:16 -0600
From: "Stuart Rohre" <rohre@arlut.utexas.edu>
To: "Jim Campbell" <jim-c@nc.rr.com>
Cc: <qrp-l@Lehigh.EDU>
Subject: [120381] Planting radials
Message-ID: <002501c1b9a8\$9e122c80\$4e100a0a@rohredt2000>

This sounds like a fairly easy method, by hydraulic action of the power washer, but now, before winter is over, is a time that you can just lay wire on the surface of the ground and maybe stake down the ends to keep it taut, then let nature take its course during the Spring, and the grass will cover

the radials, especially here in the South with San Augustine grass runners. Even Bermuda grass is good at covering over the wire if you fertilize well this coming Spring season.

Of course, elevated radials are less work if you can get the family permission to put them up. The Gull Wing type can be used if you put the vertical up about six or seven feet above the tallest family member. If you make your own vertical dipole you do not need radials at all according to studies by L. B. Cebik and other antenna gurus. Dipoles are self contained balanced antennas. They will be more effective than a quarter wave because they will not rely on antenna completion by the character of earth near the antenna.

72,

Stuart K5KVH

Date: Tue, 19 Feb 2002 18:02:33 -0700
From: "Bruzenak George" <bruzer1@mindspring.com>
To: "Karl F. Larsen" <k5di@zianet.com>
Cc: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [120382] Re: RV Travels
Message-ID: <001b01c1b9aa\$487e4c20\$43a3fc9e@bruzenak55>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Karl,

The T105's are 6v golf cart batteries, and are wired series-parallel and at full charge have over 400 amp/hour capacity. The 2000 watt inverter is to run the coffeepot, breadmaker, maybe the microwave. Remember I'll be fulltiming in the trailer so the 4 panels are probably the minimum.

I also use smaller inverters for the laptop -- and I don't intend to shave, ever again. I just retired. :-)))

73, de George K0CNT

Date: Tue, 19 Feb 2002 20:13:20 -0500
From: "N3BJ" <alanfryer@email.msn.com>

To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [120383] Planting Radials
Message-ID: <00f901c1b9ab\$cbf594e0\$5c4e6520@hppav>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

All

Stuart is right. When the grass is all matted down and browned out from the winter WX, you can lay radials down, stretch them a little tight, pin them at the end, and wait for the grass to come up around them in the spring. Let the grass grow a little higher than you would normally, then cut it a little higher than you would normally and before you know it you have an extensive, invisible radial system.

This works well up North (PA), should work anywhere grass lays low in the winter.

The time is now to plant radials!

Alan, N3BJ
Bent Mountain, VA

no verticals here, horizontal antennas work better with serious slope...

----- Original Message -----

From: "Stuart Rohre" <rohre@arlut.utexas.edu>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Tuesday, February 19, 2002 7:50 PM
Subject: Planting radials

> This sounds like a fairly easy method, by hydraulic action of the power
> washer, but now, before winter is over, is a time that you can just lay
wire
> on the surface of the ground and maybe stake down the ends to keep it
taut,
> then let nature take its course during the Spring, and the grass will
cover
> the radials, especially here in the South with San Augustine grass
runners.
> Even Bermuda grass is good at covering over the wire if you fertilize well
> this coming Spring season.
>
> Of course, elevated radials are less work if you can get the family
> permission to put them up. The Gull Wing type can be used if you put the

> vertical up about six or seven feet above the tallest family member. If
you
> make your own vertical dipole you do not need radials at all according to
> studies by L. B. Cebik and other antenna gurus. Dipoles are self contained
> balanced antennas. They will be more effective than a quarter wave
because
> they will not rely on antenna completion by the character of earth near
the
> antenna.
> 72,
> Stuart K5KVH

Date: Tue, 19 Feb 2002 19:30:34 -0600
From: "Pat J. Whelton" <pwhelton@hal-pc.org>
To: <qrp-1@Lehigh.EDU>
Subject: [120384] Radials In St. Augustine
Message-ID: <012b01c1b9ae\$332fc020\$c8e8fea9@halpc.org>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

You guys keep talking about laying radials on top of the ground and letting the grass grow over it. I'm not so sure about that. I've got St. Augustine in my lawn and it's really heavy duty stuff but I have visions of the yard guys really screwing things up royally. I put down Scott's Winterizer a couple of months ago and the lawn is a mix of yellow (last years stuff) and green. They've already been here twice since Christmas to mow. I just don't think the radials would have sufficient time to be covered up. Of course what does a city boy like me know.

By the same token it sure would be a lot easier than using an edger to cut through this gumbo we call dirt in order to cut a trench to lay the radials.

Pat - KZ5J - Houston

Date: Tue, 19 Feb 2002 20:36:16 -0500
From: KKANALZ@prodigy.net
To: <w5usj@9plus.net>,

"Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [120385] My Butternut and Wind
Message-ID: <AA-10CD7CFCA80CE761F0670162871CC450-ZZ@homebase1.prodigy.net>

When I was living on the Left Coast, almost every April, we had Santa Ana (spelling and useage contro-very over that term!) winds of up to 70 MPH. I had a roof-mounted Butternut (the genuine article) HF6V on the house.

Like any good "whip antenna", the antenna did just that: "whipped" in the wind without failure. It didn't develop any "set" in the tubing, either. I had so many radials spread out across the rooftop that neighbors thought a giant spider had attacked the house!

Like many owners and "commenters" of the Butternut, I was skeptical of their claim of "no traps", but that claim isn't quite true... they still have "traps" (of a sort), but they are pretty beefy and pretty Hi-Q.

I was very happy with the performance of MY HF-6V antenna and wouldn't hesitate to buy/erect another one.

Karl K - W8TIF
McKinney, Texas

--- Original Message ---

From: Chuck Carpenter <w5usj@9plus.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: Butternuts and Wind??

>Butternut Folks,

>

>Question came up.

>

>Anyone had negative experiences with Butternut verticals and high winds?

>

>In areas of really high winds was the recommended guying used?

>

>Direct hits or nearly direct hits with tornados don't count!

>

>

>Chuck Carpenter, W5USJ, Point, Rains Co., TX -

EM22cv, NETXQRP #1
>QRP-ARCI #5422, QRP-L #1306, SOC #57, 6 Club #201,
SMIRK #6275
>Zombie #759, QRPp-I #115, COG #11, NETXQRP
<http://www.netxqrp.org>

Date: Wed, 20 Feb 2002 08:50:27 +0700
From: "Donny Sirait" <dsirait@centrin.net.id>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [120386] Decibels and S units
Message-ID: <000501c1b9b1\$3fd10f20\$79ee92ca@donnysirait>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Dear Folks,
I believe there are lots of talented people here old timers (OT) as well.
I overheard a discussion on the air about dB which disturbs my mind.

My concern about dB at the moment is about the decrease of S units
when we reduce our power from QRO to QRP.

However the discussion is about 1 S unit is equal to 6 decibels
So scale 9 on the S meter equals to 54 dB ?? and it is agreed upon
by amateur radio and implemented in the S meters of our present
transcievers.

My understanding is there is a convention of a certain mircovolts
equal to S 9 at the S meter however I haven't heard of the convention
of 54 dB equals to S 9.

Would anybody shed me light on this??

Thank you for reading and your comments.

vy 73 de YB1BOD
Donny

Date: Tue, 19 Feb 2002 18:53:39 -0700
From: QRP Joe <AB7TT@UltralightBackpacker.com>

To: qrp-1@Lehigh.EDU
Cc: n3ao@bee.net
Subject: [120387] Re: FYBO Results to come in April--Right?
Message-ID: <A9055E70-25A4-11D6-9128-0030656AD020@UltralightBackpacker.com>
Content-Type: text/plain; charset=US-ASCII; format=flowed
Mime-Version: 1.0 (Apple Message framework v480)
Content-Transfer-Encoding: 7bit

Howdy Carter (and Folks),

Yes, mid-April. Only two more weeks to get those FYBO logs in! I'm behind on my "receipt confirmed" notes, but I'll catch up this weekend.

Great reading everyone's reports! Thanks gang!

Cheers de AB7TT,

-Joe, AZ ScQRPions

Carter N3AO wrote:

>
> Am I correct in thinking that the FYBO results don't come
> until about mid-April? I've been out of state for a while
> and wondered if I had missed the publication.

Date: Tue, 19 Feb 2002 20:00:40 -0600
From: "tmyers" <tmyers@AcademicPlanet.com>
To: "QRP-L Post" <qrp-1@Lehigh.EDU>
Subject: [120388] Verticals and Radials
Message-ID: <00f801c1b9b2\$678d1120\$0100a8c0@newkid>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I live in an area with St. Augustine grass and have found that when the soil is moist a machete pressed down into the ground cuts a slit about 18" long and the wire can be pressed into it easily. I have used this to plant a lot of them and even to bury cable. The grass grows over it very fast in the Spring. I like to do it between March and October so the little damage that is done is gone with in a month. The growing season for grass is too long here and I lose too much time mowing that could be better spent operating or building.

However, the book "Low-Band DXing" by John Devoldere is the best book on verticals I have ever seen. Nearly the whole of the book is about verticals. On page 9-16 of the book he has a picture of a "radial plow" that is home made. You just pull it along and the radial wire is sewn into the ground. Now I have never used this method. Nor have I made a vertical layout for anything lower than 40M. I just use the machete, but I guess these guys are really serious as they plant thousands of radials 600 feet long each.

I have just ordered a "Black Widow," 20 foot pole from Cabels at \$17.99 + shipping, and plan to make a field antenna (vertical) to cover 40m thru 10M. If all goes well it will be compact and will go to field with my K-1, but that will NOT make a pack antenna. I will make a good drive up and plop it out antenna or so I hope.

73s

KQ5U, Terry
Spring, Texas (NR Houston)

Date: Tue, 19 Feb 2002 20:07:05 -0600
From: "Gordon Couger" <gcouger@couger.com>
To: <dsirait@centrin.net.id>,
"Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [120389] Re: Decibels and S units
Message-ID: <000f01c1b9b3\$4c5ea480\$ab2dccd0@home>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

From: "Donny Sirait" <dsirait@centrin.net.id>

: Dear Folks,
: I believe there are lots of talented people here old timers (OT) as well.
: I overheard a discussion on the air about dB which disturbs my mind.
:
: My concern about dB at the moment is about the decrease of S units
: when we reduce our power from QRO to QRP.
:
: However the discussion is about 1 S unit is equal to 6 decibels
: So scale 9 on the S meter equals to 54 dB ?? and it is agreed upon

: by amateur radio and implemented in the S meters of our present
: transcievers.
:
: My understanding is there is a convention of a certain mircovolts
: equal to S 9 at the S meter however I haven't heard of the convention
: of 54 dB equals to S 9.
:
S meters a notoriously poorly calibrated. The only way to find out what they
read is to calibrate it with a signal generator and it may change with the
band.

Gordon W5RED

Date: Tue, 19 Feb 2002 21:11:35 -0500
From: "Dave" <wr3i@earthlink.net>
To: qrp-l@lehigh.edu
Subject: [120390] Truffle heard but missed
Message-ID: <3C72BF87.10772.AC9169@localhost>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT
Content-description: Mail message body

randy was load in tewsbury mass.
I didn't make this time shucks
dave W1QB

Date: Tue, 19 Feb 2002 19:28:55 -0700
From: "Bruzenak George" <bruzer1@mindspring.com>
To: <wr3i@earthlink.net>,
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [120391] Re: Truffle heard but missed
Message-ID: <000701c1b9b6\$5923f640\$43a3fc9e@bruzenak55>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Yup, heard him well in Colorado, but couldn't get thru either. Lots of QRM
and crashing on 40m tonight.

de George, K0CNT
Flying Pig #369, CQC #700, FISTS #8506

----- Original Message -----

From: "Dave" <wr3i@earthlink.net>

To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Sent: Tuesday, February 19, 2002 7:11 PM

Subject: Truffle heard but missed

> randy was load in tewsbury mass.
> I didn't make this time shucks
> dave W1QB

Date: Tue, 19 Feb 2002 21:30:40 -0500

From: "V Cortina" <vcortina@hvc.rr.com>

To: <dsirait@centrin.net.id>,

"Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>

Subject: [120392] Re: Decibels and S units

Message-ID: <00bc01c1b9b6\$97398440\$6401a8c0@hvc.rr.com>

MIME-Version: 1.0

Content-Type: text/plain;

charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Hi Donny,

I am not an expert here, but let me run some of my fading memories by you. S9 supposedly is the equivalent of 50 uV into a 50 ohm input of a receiver. This would be realized by a certain field strength in (I think) uV/cubic meter or something like that. Saying that S9 is 54 dB doesn't really mean anything. 54dB above or below WHAT? It is a matter of gain or negative gain (loss). Theoretically, an increase from S1 to S3 would represent a 12 dB increase in gain. This could be realized by some combination of factors totalling 12dB or about 18X power increase. This could be the transmitting station increasing power at the transmitter, or increasing the effective gain of its antenna, the receiving station increasing its sensitivity of its receiver, the effective gain of its antenna, propagation, or God knows what else. Decibels are logarithmic so 10dB equals a change of 10X, 3dB is 2X, etc.

And the fella who said s meters are notoriously unreliable and rarely calibrated properly is right on.

I would continue, but my meds are wearing off. Best 72 and 73.

Vinny KR2F

Mt. Tremper, NY FN22ua

F.I.S.T.S. #4582, 10-X #68971

NJ-QRP #349 E.C.A.R.S. #20188

----- Original Message -----

From: "Donny Sirait" <dsirait@centrin.net.id>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Tuesday, February 19, 2002 8:50 PM
Subject: Decibels and S units

> Dear Folks,
> I believe there are lots of talented people here old timers (OT) as well.
> I overheard a discussion on the air about dB which disturbs my mind.
>
> My concern about dB at the moment is about the decrease of S units
> when we reduce our power from QRO to QRP.
>
> However the discussion is about 1 S unit is equal to 6 decibels
> So scale 9 on the S meter equals to 54 dB ?? and it is agreed upon
> by amateur radio and implemented in the S meters of our present
> transcievers.
>
> My understanding is there is a convention of a certain mircovolts
> equal to S 9 at the S meter however I haven't heard of the convention
> of 54 dB equals to S 9.
>
> Would anybody shed me light on this??
>
> Thank you for reading and your comments.
>
> vy 73 de YB1B0D
> Donny
>
>
>

Date: Wed, 20 Feb 2002 02:40:25 -0000
From: "WI8W" <wi8w@arrl.net>
To: <qrp-1@lehigh.edu>
Subject: [120393] EA6/SP4A0Q
Message-ID: <0bb501c1b9b7\$f3aadf20\$6501a8c0@attbi.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Just worked EA6/SP4A0Q Baleric Is. on 20 CW at
14018.41 while running 5 watts on my Ft-920 to a
G5RV with 599 report..very easy to work.. QSL to
EC6TK

go get em

73

Thom WI8W

Date: Tue, 19 Feb 2002 21:51:44 -0500
From: Bob Mason <skydive@usa.net>
To: qrp-1@Lehigh.EDU
Subject: [120394] S-meters, units and dB
Message-ID: <NFBBLFFOILIDGGKFDNEBEEEEACCAA.skydive@usa.net>
MIME-version: 1.0
Content-type: text/plain; charset=iso-8859-1
Content-transfer-encoding: 7bit

Love the S unit discussion. I've always thought most hams would be much
happier if every S-meter on earth suddenly vanished.

I've done the tests several times, but always loose the spread sheet I put
the results in. Within the next couple days I'll try to drag a couple rigs
down to the shop and report on the microvoltic (I just invented that word)
levels required to produce various S-Meter readings on all bands. I know
I've never had any 2 rigs come reasonably close to producing the same
results.

We have a freshly calibrated HP generator, so as useless as my results will
probably be, they will be precisely useless.

72

Bob WB8CAC

Date: Tue, 19 Feb 2002 21:56:34 -0500
From: "V Cortina" <vcortina@hvc.rr.com>

To: <skydive@usa.net>,
"Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [120395] Re: S-meters, units and dB
Message-ID: <00d601c1b9ba\$35dfce80\$6401a8c0@hvc.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Having worked for HP for over 15 years Bob, I just love it!

Vinny KR2F
Mt. Tremper, NY FN22ua
F.I.S.T.S. #4582, 10-X #68971
NJ-QRP #349 E.C.A.R.S. #20188

----- Original Message -----

From: "Bob Mason" <skydive@usa.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Tuesday, February 19, 2002 9:51 PM
Subject: S-meters, units and dB

> Love the S unit discussion. I've always thought most hams would be much
> happier if every S-meter on earth suddenly vanished.
>
> I've done the tests several times, but always loose the spread sheet I put
> the results in. Within the next couple days I'll try to drag a couple
rigs
> down to the shop and report on the microvoltic (I just invented that
word)
> levels required to produce various S-Meter readings on all bands. I know
> I've never had any 2 rigs come reasonably close to producing the same
> results.
>
> We have a freshly calibrated HP generator, so as useless as my results
will
> probably be, they will be precisely useless.
>
> 72
> Bob WB8CAC
>
>
>
>

Date: Tue, 19 Feb 2002 21:55:46 -0500
From: "John Paul Keon" <jpkeon@nc.rr.com>
To: <wi8w@arrl.net>,
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [120396] Re: EA6/SP4A0Q
Message-ID: <027001c1b9ba\$18370880\$6401a8c0@nc.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Thanks, just worked him 599 at 100 watts, and then
579 with 5 watts, and he was 599 here on the right coast.

John Paul, Raleigh, NC

----- Original Message -----
From: "WI8W" <wi8w@arrl.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Tuesday, February 19, 2002 9:40 PM
Subject: EA6/SP4A0Q

> Just worked EA6/SP4A0Q Baleric Is. on 20 CW at
> 14018.41 while running 5 watts on my Ft-920 to a
> G5RV with 599 report..very easy to work.. QSL to
> EC6TK
>
> go get em
>
> 73
>
> Thom WI8W
>
>
>

Date: Tue, 19 Feb 2002 21:57:27 -0500
From: "John Paul Keon" <jpkeon@nc.rr.com>
To: <wi8w@arrl.net>,
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [120397] Re: EA6/SP4A0Q

Message-ID: <027801c1b9ba\$54d84600\$6401a8c0@nc.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I worked him on 14018.41 with 5 watts using Kenwood TS440 with
Carolina Windom, at 25 feet and he was 599 whole time too.
JohnPaul/AB4PP

Subject: EA6/SP4A0Q

Date: Wed, 20 Feb 2002 03:12:29
From: "Mike WA8BXN" <hubby2k@hotmail.com>
To: qrp-l@Lehigh.EDU
Subject: [120398] Cub fox on 7048.9 @ 3:21Z
Message-ID: <F266tZEcef9ajQ3LAlR0000e732@hotmail.com>
Mime-Version: 1.0
Content-Type: text/html

<html><div style='background-color:'><DIV>listening up about 1/2 kc right now</
DIV></div><br clear=all><hr>Join the world s largest e-mail service with MSN
Hotmail. Click Here
</
html>

Date: Tue, 19 Feb 2002 20:14:02 +0000
From: "James R. Duffey" <jamesd1@flash.net>
To: Tayloe Dan-P26412 <Dan.Tayloe@motorola.com>,
qrp-l <qrp-l@lehigh.edu>
Subject: [120399] Re: Radials for Verticals
Message-ID: <B898628A.11C39%jamesd1@flash.net>
Mime-version: 1.0
Content-type: text/plain; charset="US-ASCII"
Content-transfer-encoding: 7bit

Dan - Yes, I looked into such "forked? radials shortly after I gave Dave his
answer. They work as expected. However, I concluded that they are probably
not really worth the trouble. They are much more difficult to install,
particularly in a portable situation. They don't save all that much wire. If
you replace 32 0.2 wavelength radials with 48 0.1 wavelength ones (one for

the first 0.1 wavelength, then fork to 2 for the next 0.2 wavelength) you only save 1.6 wavelength of wire. On 20 M this is only 100 ft out of 420 or so. I concluded the savings, \$5 or less, probably does not make up for the additional hassle of forking the radials. You need to make 3 slits instead of one, and you have the added problem of reliability of the buried splpice. For muliband verticals, the situation becomes even more muddled. - Duffey

--

James R. Duffey KK6MC/5
Cedar Crest, NM DM65

Date: Tue, 19 Feb 2002 22:17:01 -0800
From: Paul Stroud <aa4xx@ipass.net>
To: qrp-l@lehigh.edu
Subject: [120400] What good is ONE measley milliwatt?
Message-ID: <3C733F5D.A6A1FED8@ipass.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Gang,

It was a real treat to hear from six stations who copied the five letter codeword "GREEN" during last night's 30M QRSS10 beacon session. The beacon was running 1 milliwatt output into a 30M dipole up 60 feet.

Congratulations to the following stations who confirmed the codeword:

N4SO	Ken	AL
W0CH	Dave	MO
AE5K	Don	AR
ON5EX	Johan	Belgium
ON6UL	Luk	Belgium
AK0B	Stan	MO

72, Paul AA4XX Raleigh, NC

Date: Tue, 19 Feb 2002 21:19:12 -0600
From: David Gauding <david.gauding@bbs.galilei.com>
To: qrp-l@lehigh.edu
Subject: [120401] Re: EA6/SP4A0Q
Message-ID: <5.1.0.14.0.20020219211320.00a7b320@bbs.galilei.com>

Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Worked at 0312Z.

Used 1W from Corsair I to a St. Louis Express Vertical over eight 16.5' St. Louis Radials (unburied) <g>. Some fills needed from me.

Sorry - just couldn't resist!

DX left the frequency at 0317Z.

Thanks to WI8W for the heads-up.

de Dave, NF0R nf0r@slacc.com

Date: Tue, 19 Feb 2002 22:22:28 EST
From: RLemmel@aol.com
To: qrp-l@lehigh.edu
Subject: [120402] NOT TRUFFLE LOG YET
Message-ID: <37.23119bc5.29a47074@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Truffle Hunters,

Before I sort through my bad penmanship and post log later I would like to ask a question. I didn't hear my first response until 4 minutes into the hunt. I thought something was broke and started looking around. I turned the power knob on the K2 to make sure that I was at 5 watts and I was. It was right after I fiddled with the knob that I heard the first response. In a nutshell, did anyone hear me the first four minutes or do I need to diagnose the K2? TIA 72/oo-randy.wv9n

Date: Tue, 19 Feb 2002 20:27:24 -0700
From: "Rod N0RC" <rod@n0rc.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [120403] FOX announce N0RC Thu nite US time
Message-ID: <000b01c1b9be\$84094790\$6401a8c0@greyrock>

MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Tag I'm it! ;-)

0200 - 0400 Fri 22-Feb-2002 UTC
1900 - 2100 Thu 21-Feb-2002 MST

I'll be on the high side of 7040 and my fellow fox John. N1QO will be on the low side.

I'll be working split and listening down. I won't be taking calls on or near my freq until very late in the hunt, or the crowd thins out. The exchange will be <UR CL> 559 CO ROD 5W <UR CL> K. We're done when I send QSL, QSL TU, TU, QRZ? or some variant with a "?" and, possibly, my call. Then it's back to the "WALL-O-SOUND" to pick out another station.

I'm trying for 90-100 QSOs the time. Here's hoping the BAND CONDX are good for all.

GL

73, Rod N0RC
Ft Collins, CO

Date: Tue, 19 Feb 2002 21:28:49 -0600
From: Chuck Carpenter <w5usj@9plus.net>
To: skydive@usa.net,
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [120404] Re: S-meters, units and dB [precisely right]
Message-ID: <3.0.2.32.20020219212849.0069c2d0@mail.9plus.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Absolutely... 8^)...

Love it.

>
>We have a freshly calibrated HP generator, so as useless as my results will
>probably be, they will be precisely useless.
>

Just use 6 dB per S Unit and you'll be as close as anyone....!

Chuck Carpenter, W5USJ, Point, Rains Co, TX EM22cv, NE-TX QRP #1

Date: Tue, 19 Feb 2002 19:32:31 -0800
From: "Trevor Jacobs" <fxtech@earthlink.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [120405] Cub Fox?
Message-ID: <006301c1b9bf\$3ae0fd00\$d8a0b2d1@tjacobs>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Geese, that's what I get for walking away from the radio for 2 minutes to answer the phone! Dave was strong here into Burbank,CA for the first half of the hunt, and was getting stronger, I walk away for 2 minutes and he's QSY'd? I'm not hearing him anywhere or any hounder either. Is he still there somewhere? Did the band just take a major nose dive? Is there any hope in finding tonights FOX??? Hi - stay tuned - same bat time same bat channel...

72/73's
Trev
KG6CYN

Date: Tue, 19 Feb 2002 22:44:16 EST
From: RLemmel@aol.com
To: fpqrp-1@mpna.com, qrp-1@lehigh.edu
Subject: [120406] TRUFFLE LOG 02-19-02
Message-ID: <185.3dbd3fe.29a47590@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Thanks to all for the good turnout tonight. Didn't hear the first call until 4 minutes into the hunt. I don't know if I have a rig problem, a hearing problem, or both. I had a great time in my three hunts this year (they were my first three ever) and looking foward to next year. Thanks to all who turned out and wish I could have those first four minutes back to hand out more truffle :-).

0134	W5YR	55N	TX	GEORGE	5W	
0136	W4BQP	57N	NC	JIM		5W
0137	K8MIA	55N	WV	JIM		5W
0138	WE9K	5NN	WI	GLENN	5W	
0140	K4GI	55N	GA	JIM		5W
0141	K5JHP	55N	TX	BILL		5W
0143	KG4LDY	55N	VA	JIM		5W
0144	KC9LC	55N	VA	RANDY	5W	
0145	K8CV	55N	MI	WALT		5W
0146	K8KFJ	5NN	WV	GARY	5W	
0147	WA8BXN	55N	OH	MIKE	5W	
0149	K0EVZ	579	ND	DOC		5W (not sure, can't read my writing)
0150	N3BJ	55N	VA	ALAN		5W
0151	N9NE	58N	WI	TODD		5W
0152	K8DD	55N	MI	HANK		5W
0153	W5USJ	55N	TX	CHUCK	5W	
0155	AF4PS	55N	FL	MAC		3W
0156	WR50	579	TX	DAVE		5W
0157	K5SR	5NN	TX	DALE		5W
0158	N8VAR	55N	OH	RON		5W
0159	K4BYF	55N	FL	JACK		5W
0159	N10DL	559	NH	ARON		5W
0200	WV9N	-----TRUFFLE-----				

Again, all my thanks and looking foward to next year-72/oo,randy,wv9n

Date: Tue, 19 Feb 2002 19:45:16 -0800 (PST)
 From: Jack WsixABC <w6abc@yahoo.com>
 To: qrp-1@Lehigh.EDU
 Subject: [120407] Last Night with the Tiny Tornado on 40
 Message-ID: <20020220034516.90349.qmail@web14208.mail.yahoo.com>
 MIME-Version: 1.0
 Content-Type: text/plain; charset=us-ascii

Thanks to those who listened for my new little Tiny Tornado in the Altoids Tin. I was operating with 12v battery power and was outputting about 500mW with ant 2 ele yagi pointing NE. The results so far are 2 QSO's and 3 email confirms.

QSO's:

W6ZOH in Boise, ID 549

W5NUI near Salem, OR 559

Reported but not worked:

K0YWD in Stevensville, MT 569

K7FD in Seal Rock, OR 589 (previous night)
AK7D in Portland, OR (heard but no sig report)
My first QSO with the rig was with W0TUP in Minot, ND.
Fun stuff!
72,
Jack W6ABC

=====

Website: <http://home.pacbell.net/friday2k>
QRP-L #2193 SOC#165 K2#1272 K1#37 QRPp-I #176

Do You Yahoo!?
Yahoo! Sports - Coverage of the 2002 Olympic Games
<http://sports.yahoo.com>

Date: Tue, 19 Feb 2002 20:54:50 -0700 (MST)
From: "Karl F. Larsen" <k5di@zianet.com>
To: <qrp-l@lehigh.edu>
Subject: [120408] Fox: Cub Fox Spot
Message-ID: <Pine.LNX.4.33.0202192051400.3895-1000000@Daisy.dog>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

The Cub Fox is out of the defined Cub band at 7.04928 and is under a lot of heavy noise at 0345 Z. Since 7.060-70 is very quiet except for a couple of QSO's we need to look around for the good frequencies with more care.

--
Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -
<http://www.zianet.com/k5di/>

Date: Tue, 19 Feb 2002 20:55:49 -0700 (MST)
From: "Karl F. Larsen" <k5di@zianet.com>
To: Trevor Jacobs <fxtech@earthlink.net>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [120409] Re: Cub Fox?
Message-ID: <Pine.LNX.4.33.0202192055050.3895-1000000@Daisy.dog>

MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi Trevor try 7.04926 and you will find the Fox.

On Tue, 19 Feb 2002, Trevor Jacobs wrote:

> Geese, that's what I get for walking away from the radio for 2 minutes
> to answer the phone! Dave was strong here into Burbank,CA for the first
> half of the hunt, and was getting stronger, I walk away for 2 minutes
> and he's QSY'd? I'm not hearing him anywhere or any hounder either. Is
> he still there somewhere? Did the band just take a major nose dive? Is
> there any hope in finding tonights FOX??? Hi - stay tuned - same bat
> time same bat channel...
>
> 72/73's
> Trev
> KG6CYN
>
>

--
Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -
<http://www.zianet.com/k5di/>

Date: Tue, 19 Feb 2002 22:02:14 -0600
From: Nick Kennedy <nkennedy@tcainternet.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [120410] RE: Decibels and S units
Message-ID: <01C1B991.17762620.nkennedy@tcainternet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

You wouldn't believe how emotional some folks on the "antennas" newsgroup get over any mention of the mythical 6-dB S-unit. But I figure what the heck, we can still have a theoretical standard S-unit even if typical receivers don't adhere to it that well.

Yes, S9 would be 54 dB above S0 based on the 6-dB unit. So with 5 watts, we are 13 dB below 100 watts, putting us at about S7 (slightly under) when the 100 watt station is S9. Now, if the 100 watt station produces 20 over

S9, the 5 watt station can be S9+.

If the receiver has a liberal 4 dB per S-unit policy, we are now at S6 with our 5 watts. OK, that's fine too. I've heard S0 (S-zero) signals that were perfectly readable. (I've also heard S7 signals that were not--generally in line noise.)

I'm building some signal source and wide range power measuring devices.
Can't wait to actually measure the response of some of my rigs' S-meters.

As another poster said, I've always heard of 50 uV at the antenna terminals being a standard for S9.

72--Nick, WA5BDU

My S-meter ... I like to watch it dance, but I don't pay much attention to what it says.

From: "Donny Sirait" <dsirait@centrin.net.id>

: Dear Folks,
: I believe there are lots of talented people here old timers (OT) as well.
: I overheard a discussion on the air about dB which disturbs my mind.
:
: My concern about dB at the moment is about the decrease of S units
: when we reduce our power from QRO to QRP.
:
: However the discussion is about 1 S unit is equal to 6 decibels
: So scale 9 on the S meter equals to 54 dB ?? and it is agreed upon
: by amateur radio and implemented in the S meters of our present
: transceivers.

Date: Tue, 19 Feb 2002 23:14:04 EST
From: K5BDZ@aol.com
To: hqrp@stevens.com, qrp-1@lehigh.edu, GQRP@yahoogroups.com
Subject: [120411] subject line vs DELETE
Message-ID: <8a.145135c1.29a47c8c@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

I know most of you belong to many QRP lists as I do. That's at least 200 messages or so each day (excluding 80 or so personal messages under another

e-mail address and over 100 e-mails at the office!).

Many of us do not read all the messages (try less than 20%), and then only those whose SUBJECT line looks interesting.

FACT: The DELETE button is faster than the eye.... so I suggest if we have a special message for any certain ham, let's put his/her call letters in the subject line whether direct e-mail or by sending it over the QRP Lists.

I've had a number of hams complain because I don't answer their e-mail and fact is they leave the subject line either blank or with some non-related subject matter.

Like all of you, I do want to answer all personal e-mail...but we need a little help.

Thanks...and I wonder which 80% deleted this e-mail because of the subject line...Hi !
Bill K5BDZ

Date: Tue, 19 Feb 2002 23:19:07 -0800
From: "W2WU" <w2wurjj@verizon.net>
To: <nkennedy@tcainternet.com>,
"Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [120412] Re: Decibels and S units
Message-ID: <001e01c1b9de\$feaccba0\$71c2fea9@w2wurjj>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

The best receiver I've used was a Stoddard {Calibrated Front end, IF & AF in dB & uV.} Had step attenuators - Audio output calibrated in mW & dB into 600 Ohms... a dream rx. <W2WU>

----- Original Message -----

From: Nick Kennedy <nkennedy@tcainternet.com>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Sent: 19 February, 2002 20:02
Subject: RE: Decibels and S units

> You wouldn't believe how emotional some folks on the "antennas" newsgroup
> get over any mention of the mythical 6-dB S-unit. But I figure what the
> heck, we can still have a theoretical standard S-unit even if typical
> receivers don't adhere to it that well.
>

> Yes, S9 would be 54 dB above S0 based on the 6-dB unit. So with 5 watts,
> we are 13 dB below 100 watts, putting us at about S7 (slightly under) when
> the 100 watt station is S9. Now, if the 100 watt station produces 20 over
> S9, the 5 watt station can be S9+.
>
> If the receiver has a liberal 4 dB per S-unit policy, we are now at S6
with
> our 5 watts. OK, that's fine too. I've heard S0 (S-zero) signals that
> were perfectly readable. (I've also heard S7 signals that were
> not--generally in line noise.)
>
> I'm building some signal source and wide range power measuring devices.
> Can't wait to actually measure the response of some of my rigs' S-meters.
>
> As another poster said, I've always heard of 50 uV at the antenna
terminals
> being a standard for S9.
>
> 72--Nick, WA5BDU
>
> My S-meter ... I like to watch it dance, but I don't pay much attention to
> what it says.
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>
> From: "Donny Sirait" <dsirait@centrin.net.id>
>
>
> : Dear Folks,
> : I believe there are lots of talented people here old timers (OT) as
well.
> : I overheard a discussion on the air about dB which disturbs my mind.
> :
> : My concern about dB at the moment is about the decrease of S units
> : when we reduce our power from QRO to QRP.
> :
> : However the discussion is about 1 S unit is equal to 6 decibels
> : So scale 9 on the S meter equals to 54 dB ?? and it is agreed upon
> : by amateur radio and implemented in the S meters of our present
> : transcievers.
>

Date: Tue, 19 Feb 2002 23:36:28 -0500
From: "George Heron N2APB" <n2apb@erols.com>
To: "QRP-L" <qrp-l@lehigh.edu>, "NJQRP" <njqrp@njqrp.org>

Subject: [120413] K0ZK in Maine looking for a ride to Atlanticon
Message-ID: <00cf01c1b9ca\$5a337a60\$b4c13ad0@GHLTP4>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Here's an eager Maine QRP'er looking for traveling companion to Atlanticon
QRP Weekend ... any takers? (Please reply to Arnold).

73, George N2APB

----- Original Message -----
From: "Arnold Olean" <aolean@wbachradio.com>
To: <n2apb@amsat.org>
Sent: Saturday, February 16, 2002 11:04 PM
Subject: Looking for a ride

Hello George,

I would like to attend the Atlanticon if I can find someone to travel with
from Maine. Do you have a bulletin board of people looking for rides? My
vehicle only seats two, so I would like to hitch up with some qrp'ers from
Maine or NH who are going down in a vehicle that seats three or more.
Otherwise, it's just too much trouble for that distance. I can help with
driving, expenses, willing to double up/triple up/more with a room. I
Promise to bring lots of qrp lobsters from Maine.

Arnold Olean, K0ZK
Box 73
Lebanon, Maine, 04027
(207)457-1551

Date: Tue, 19 Feb 2002 22:55:38 -0600
From: Dave Sjolín <sjolin@swbell.net>
To: Qrp-l Reflector <qrp-l@Lehigh.EDU>
Subject: [120414] FOX: Cub Fox N0IT
Message-ID: <3C732C4A.135D2983@swbell.net>
MIME-version: 1.0
Content-type: text/plain; charset=us-ascii
Content-transfer-encoding: 7BIT

Thanks to all who stopped by to keep me busy through out most of the two

hours. I got 67 hounds tonight including two dupes. The milliwatters came out in force. I got six milliwatters with one at 25mW and one at 50mW.

7055 turned out to a very popular frequency tonight what with the 5 min tuner upper, a couple SSB qso's, some strange digital signal in addition to the heavy qrn. I know there were some calling that I just couldn't get. Sorry.

I also want to apologize for not being there at 02:00. I screwed up setting my vcr and I didn't want to miss "24." Took me ten minutes to figure out what I did wrong. Didn't get started until 02:11 and then all xxx broke loose. Whoa what a pileup. For a second I thought maybe I should look for the dx and then I realized I was it. HI

will get the log up tomorrow. Thanks again for a fun evening.

73 de Dave, N0IT

Date: 20 Feb 2002 00:07:31 EST
From: Michael Goins <mgoins@usa.net>
To: qrp-l@lehigh.edu
Subject: [120415] WTB: Ted Hart's book
Message-ID: <20020220050731.17069.qmail@cpdvgl100.netaddress.usa.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: quoted-printable

I know this is really a reach, but I was wondering if anyone has a copy of the
Ted Hart (w5qrj) book, Small High Efficiency Antennas Alias the Loop? =

Still trying to learn all I can about small transmitting loops. Thanks for the
bandwidth.

mike
wb5yjx
1 watt all the time =

Get free e-mail and a permanent address at <http://www.amexmail.com/?A=3D1=>

Date: Tue, 19 Feb 2002 21:17:44 -0800
From: "Alan Kaul" <alan.kaul@worldnet.att.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [120416] A little late--but I thought I'd ask....
Message-ID: <005201c1b9cd\$ee21a0a0\$af25cd18@charterpipeline.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Howdy , , , ,

SET my QRP-L mail to POSTPONE while I was away on a ski trip over the holiday weekend (also the ARRL CW DX contest weekend)!

Presume some of this gang entered the contest.....
HOW DID YOU DO?

I only operated two bands, used "compromise antennas" on 40 and 10, and found time to do plenty of skiing... I had only 60 Q's, 4 mults on 40 and 9 mults on 10 ... using the FT817 at 5-watts. Still plenty of fun! About 3500-points.

If you worked it -- send in your logs!

72/73 de alan
Alan Kaul, W6RCL, LaCanada, CA
w6rcl@amsat.org
<http://home.att.net/~alan.kaul/index.html>

Date: Wed, 20 Feb 2002 00:26:12 -0500
From: "George Heron N2APB" <n2apb@erols.com>
To: "EPAQRP" <epaqrp-l@lehigh.edu>, "QRP-L" <qrp-l@lehigh.edu>,
 "NJQRP" <njqrp@njqrp.org>
Subject: [120417] Warber Kits now ordered through Small Wonder Labs
Message-ID: <00fd01c1b9cf\$1f4551d0\$b4c13ad0@GHLTP4>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Well folks, after shipping some 1800 Warblers over the past 18 months, the NJQRP Club is turning the kits over to Small Wonder Labs (<http://www.smallwonderlabs.com>).

The owner of SWL is Dave Benson, K1SWL. Dave is also the original designer of the kit and he assures us that the Warblers kits will continue to be available through his company, although there may be a slight delay in availability as his operation swings into full production mode.

Any Warbler orders now received by the NJQRP Club will be automatically transferred over to Small Wonder Labs and placed in a fulfillment queue awaiting the resumption of kit shipments. Please contact K1SWL for further questions concerning the Warbler Kit.

It's been a fantastic ride bringing a great and inexpensive PSK31 transceiver kit to so many hams throughout the world, publishing in numerous ham journals, and corresponding with so many kind souls regarding their warbling pursuits. Hams, homebrewers, and especially QRPers are a very special breed and such a pleasure to deal with.

Thanks for everyone's outstanding support of our QRP club's major initiative over the last 1.5 years of this kit's run. It has helped bring us all benefits such as QRP Homebrewer magazine, the annual Atlanticon QRP Forum, and other kits along the way.

Please have the confidence of continued availability of this K1SWL kit, which is now officially part of Small Wonder Labs' PSK-xx product line. Dave assures us that those now ordering will soon be warbling, and the NJQRP Club will do everything in its power to help the transition be smooth.

73,

--George Heron N2APB, n2apb@amsat.org

and Joe Everhart, N2CX n2cx@voicenet.com (for the NJQRP Club)

--Dave Benson, K1SWL, dave@smallwonderlabs.com (for Small Wonder Labs)

Date: Wed, 20 Feb 2002 00:26:55 -0800
From: Paul Stroud <aa4xx@ipass.net>
To: qrp-l@lehigh.edu
Subject: [120418] Revised AA4XX 30M Beacon Sked Wednes-Thurs
Message-ID: <3C735DCF.C85013BF@ipass.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Gang,

The most common comment that is being received from the QRSS mode listeners is that they want to try to copy lower power levels.

With that in mind, the AA4XX beacon will be running 500 microwatts QRSS30 mode tomorrow (Wednesday). The longer characters will hopefully facilitate reception of the 1/2 milliwatt signal.

The beacon will run from 23:00-0700 UTC Wednesday (Wednes night 6PM-2AM EST US time) on 10,140.000 khz. The beacon string will be as follows:

AA4XX 500uW <4 letter codeword repeated 8 times>

Many of the listeners are reporting that they are not hearing the beacon at the 1mW power level, although they are seeing screen traces using Spectran and Argo. It will be exciting to see if the listeners can determine how far below the audible noise floor they will be able to copy using the powerful DSP programs mentioned above.

The beacon will NOT run Thursday in order to give our faithful listeners a night off.

ON5EX will be posting a Friday night QRSS10 schedule with us soon, and another joint ON5EX/AA4XX QRSS session is being planed for Saturday. Details will be sent out via the beacon email list and to QRP-L.

For more information on QRSS, take a look at:

<http://www.ussc.com/~turner/qrss1.html>

Thanks to all the listeners who make the sessions possible.

72, Paul AA4XX Raleigh, NC

Date: Wed, 20 Feb 2002 01:30:24 -0500
From: Dan Puckett <wd8aau@woh.rr.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [120419] Re: More late breaking news on the TDA1072 AM rx chip
Message-ID: <5.1.0.14.2.20020220012340.009e4600@pop-server.woh.rr.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 2/18/02, Nils R. Young wrote:

>You poor suffering morons!

>

>I found a place local that has the TDA1072 AM receiver chip:

>
>Electronix (<http://www.electronix.com>) 937.878.1828/Fax 937.878.1972
> or 800.223.3205/fax 800.352.9961
>

So. Ok. Like, where in Fairborn is this place? One Herald Square. Never heard of it. Nice catalog. Do they have a showroom or is it a warehouse operation with a will call desk? What's the story, me amigo?

Dan

Date: Wed, 20 Feb 2002 09:19:28 GMT
From: "Adrian Weiss" <aweiss@usd.edu>
To: qrp-l@lehigh.edu
Subject: [120420] PWOT on 30m
Message-ID: <GRTLND02.3DE@mail.usd.edu>

Hi gang -- it's not supposed to work this way! 1st night that PWOT on Trinidad & MV Archipelago and I work him!!!!

It took 3 hours of calling until the pack thinned out and then I slipped way up to 129.1 (QRJ 122.4).

Check out the pix on www.trindade2002.com. What a rock!

Heard some other QRP'rs working DX earlier. A couple of us did RN6BY in sequence, and he heard Rod N0RC but Rod only sent a single "N0RC" to his query and missed a sure bet!

I hate to keep harping on it, but 30m is THE evening DX band these days.

72, Ade W0RSP

Date: Wed, 20 Feb 2002 05:51:17 -0500
From: "Charles Mabbott" <aa8vs@msn.com>
To: qrp-l@Lehigh.EDU
Subject: [120421] Decibels and S units - yeeep
Message-ID: <F13WPdjnuJrPFhftFn00000fc84@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

Almost as much fun as listening to the SWR wars and how
you got to have 1:1 or never get out yada yada.....
Got to love it
73 oo
Chuck AA8VS

>From: Nick Kennedy <nkennedy@tcainternet.com>
>Reply-To: nkennedy@tcainternet.com
>To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
>Subject: RE: Decibels and S units
>Date: Tue, 19 Feb 2002 22:02:14 -0600
>
>You wouldn't believe how emotional some folks on the "antennas" newsgroup
>get over any mention of the mythical 6-dB S-unit. But I figure what the
>heck, we can still have a theoretical standard S-unit even if typical
>receivers don't adhere to it that well.
>
>Yes, S9 would be 54 dB above S0 based on the 6-dB unit. So with 5 watts,
>we are 13 dB below 100 watts, putting us at about S7 (slightly under) when
>the 100 watt station is S9. Now, if the 100 watt station produces 20 over
>S9, the 5 watt station can be S9+.
>
>If the receiver has a liberal 4 dB per S-unit policy, we are now at S6 with
>our 5 watts. OK, that's fine too. I've heard S0 (S-zero) signals that
>were perfectly readable. (I've also heard S7 signals that were
>not--generally in line noise.)
>
>I'm building some signal source and wide range power measuring devices.
> Can't wait to actually measure the response of some of my rigs' S-meters.
>
>As another poster said, I've always heard of 50 uV at the antenna terminals
>being a standard for S9.
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>72--Nick, WA5BDU
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>My S-meter ... I like to watch it dance, but I don't pay much attention to
>what it says.
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>
>From: "Donny Sirait" <dsirait@centrin.net.id>
>
>
>: Dear Folks,
>: I believe there are lots of talented people here old timers (OT) as well.
>: I overheard a discussion on the air about dB which disturbs my mind.
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>: My concern about dB at the moment is about the decrease of S units
>: when we reduce our power from QRO to QRP.
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>: However the discussion is about 1 S unit is equal to 6 decibels
>: So scale 9 on the S meter equals to 54 dB ?? and it is agreed upon
>: by amateur radio and implemented in the S meters of our present
>: transceivers.
>

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<http://photos.msn.com/support/worldwide.aspx>

Date: Wed, 20 Feb 2002 06:34:04 -0500
From: Ray Sills <raysills@1stconnect.com>
To: QRP list <qrp-l@lehigh.edu>
Subject: [120422] Re: Broadcast Band Verticals
Message-ID: <B89878D3.E101%raysills@1stConnect.com>
Mime-version: 1.0
Content-type: text/plain; charset="US-ASCII"
Content-transfer-encoding: 7bit

Hi Gang:

It's true that most MF (AM band) broadcast stations use vertical towers as antennas. Some have multiple towers (as many as 12) in various configurations, often "in-line arrays".. (like a Yagi sliced down the middle of the boom and turned 90 degrees to the vertical.

One AM station in the NYC Area, WOR 710 KHz, once upon a time used a dipole antenna (yes, a dipole). The dipole was a very ham-like half wave, strung between two towers. Eventually, the station re-engineered the antenna to convert it to a 3-element array. Each tower was one element, and the feeder line that originally went to the dipole, was electrically disconnected from the dipole, but left in place, and used as the 3rd element in the array.

One thing AM broadcast stations do is control the "pattern" (coverage area) of the RF signal by changing the RF phase and power level of the RF going into each tower. The antenna design engineers need to send a signal toward the main city or coverage area, and often need to remove signal in certain other directions (using a null off the "side" of the array) to protect the coverage of other stations on the same or adjacent frequencies.

And depending on the quality of the ground system and the soil conditions at

the transmitter site, maintaining the proper shape for the RF pattern can be quite a challenge, especially when the weather changes from season to season.

73 de Ray
K2ULR
FN20t1

> From: KKANALZ@prodigy.net
> Reply-To: KKANALZ@prodigy.net
> Date: Mon, 18 Feb 2002 11:55:12 -0500
> To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
> Subject: Re: Broadcast Band Verticals
>
> On 2/18, Tom (in a fit of perspicacity)wrote:
>
> From: "Tom Pennebaker" <n4rs@netpath-rc.net>
> To: "Low Power Amateur Radio Discussion"
>
>> Omni-directionality.....whew..another one of those 50
> cent words..<snip>
>
> Actually, Tom, I suspect that commercial "broadcast
> band" broadcasters use verticals (rather than "hori-
> zontal") for antennas is because of:
>
> a) Cost Considerations (real estate required, mainly)
> and
> b) Filed-for-FCC-Coverage area (you know, field
> strength in microvolts-per-meter and that sort of
> thing)
>
> By the way, Tom, not ALL commercial broadcasters in
> the MF band use "omnidirectionality", especially
> *after* sundown.
>
> Can you (or anyone) imagine the length of a *DIPOLE*
> at 820 kHz? And.... at high power, how would that air-
> dielectric feedline been supported at say... a quarter-
> wave above ground? A half-wave would be even worse!
>
> Karl K - W8TIF
> McKinney, Texas
>
>

Date: Wed, 20 Feb 2002 07:25:09 -0500
From: Tim ORourke <TORourke@KaiserFT.com>
To: "'qrp-l@Lehigh.EDU'" <qrp-l@Lehigh.EDU>
Subject: [120423] Re: FOX: Cub Fox N0IT
Message-ID: <0514B74864ACD511934400508BBB5E3401E27F@EMAIL1>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

Dave

Had u spotted in truck on way home from scouts. When I got the rig on it was 3:10 and u were covered up with SSB nerd, never heard u agn in NC.
Tim KG4CHX

Date: Wed, 20 Feb 2002 05:43:03 -0700 (MST)
From: "Karl F. Larsen" <k5di@zianet.com>
To: <qrp-l@lehigh.edu>
Subject: [120424] QRP Mini-Tuner
Message-ID: <Pine.LNX.4.33.0202200535550.1594-100000@Daisy.dog>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

While I was buying the parts at Dan's small parts to build a 2N2/40 radio I bought the QRP tuner kit that is \$16.00. It's the two small variable capacitors a switch to take the tuner out of the circuit, 3 toroid coil forms and wire and already made BNC connectors with pigtails and a rotory switch used to select taps on the coils. It's a Tee type tuner and will work from 80 to 10 meters.

I plan to build this tuner into the 2N2 radio. That should make it a joy to use outside with odd antenna's

--

Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -
<http://www.zianet.com/k5di/>

Date: Wed, 20 Feb 2002 07:21:47 -0500
From: G Brandon Hoyt <preacher102677@juno.com>
To: qrp-l@Lehigh.EDU

Subject: [120425] Cebik's book still available from ARCI??
Message-ID: <20020220.072151.-153125.1.preacher102677@juno.com>
MIME-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: 7bit

Hey guys,
Was surfin' the web today lookin' over the QRP arci website, and
discovered that the expiration date on ordering Cebik's antenna book has
past, anyone know if they're still available?
LIC,
G. Brandon Hoyt --"Known far and Wide as the Great Pumpkin."
Photographer, Philosopher, Preacher, Pirate, Poet.
"God didn't promise me the sun wouldn't smite me by day" James D. Vernon
DE KG4GVL Clear.

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<http://dl.www.juno.com/get/web/>.

Date: Wed, 20 Feb 2002 08:40:49 -0500
From: Hank Kohl K8DD <k8dd@arrl.net>
To: preacher102677@juno.com,
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [120426] Re: Cebik's book still available from ARCI??
Message-ID: <5.1.0.14.2.20020220083537.03976d80@mail.arenet.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Yes, they are still available!
Along with four years of the Dayton Hamvention papers (and the first two
will be available soon), The NOGA QRP Club Compendium, and some really cool
coffee cups and a lot more.

<http://www.qsl.net/k8dd/toystore/thetoystore.htm>

At 2/20/02 07:21 AM -0500, G Brandon Hoyt wrote:

>Hey guys,
>Was surfin' the web today lookin' over the QRP arci website, and
>discovered that the expiration date on ordering Cebik's antenna book has
>past, anyone know if they're still available?
>LIC,

>G. Brandon Hoyt --"Known far and Wide as the Great Pumpkin."
>Photographer, Philosopher, Preacher, Pirate, Poet.
>"God didn't promise me the sun wouldn't smite me by day" James D. Vernon
>DE KG4GVL Clear.

```
*****
*
*           The QRP-ARCI Toy Store           *
* http://www.qsl.net/k8dd/toystore/thetoystore.htm *
*
*
*****
```

Date: Wed, 20 Feb 2002 08:52:37 EST
From: K5BDZ@aol.com
To: GQRP@yahoogroups.com, qrp-1@lehigh.edu
Subject: [120427] Freidrichshafen dates?
Message-ID: <9b.2319b552.29a50425@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

When is Freidrichshafen this year? I may be in Germany the latter part of
June.
Thanks

Bill K5BDZ

Date: Wed, 20 Feb 2002 09:19:45 -0500
From: John Wagner <john@wagner-usa.net>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>,
qfox@yahoogroups.com
Subject: [120428] FOX: 2/21/2002 US TIME N1Q0 Fox Announcement
Message-ID: <3C73B081.1B6E87CA@wagner-usa.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Fellow Hound Doggies,

I'll be the lower fox this Thursday 2/21/2002 (US TIME) sharing the fox
field of fire with Rod, N0RC who will be your upper fox.

I will start at 2100 EST until 2300 EST and set up shop somewhere

between 7.030 and 7.040. My exchange is:

YOURCALL 55N VT JOHN 5W YOURCALL BK

After which time the hound who's call matches YOURCALL will send their exchange of:

BK (optional "de YOURCALL") 55N SPC NAME PWR BK

I will acknowledge with QSL or 72 or TU and move along to the next hound doggie I hear in the pack.

I plan on listening DOWN as far as 1.5KHz. I will listen to my calling frequency near the end of the hunt but not until then. If you are RIT challenged then use your VFO to move yourself down off my frequency but not enough to take me out of your passband (i.e. don't zero beat my calling freq).

My preference is for you to send your call TWICE but not more than that. If I say "AGN" then pipe up agn! If I send a partial (i.e. KB? or N4?) then only stations with that partial should respond.

This will be my last run of this fox season. It has been a pleasure to serve. Thank you to the Fox committee for their hard work in organizing this event and a double thanks to all the hounds who show up and make it worthwhile.

73,

John, N1QO
Holland, VT

--

John Wagner - john@wagner-usa.net
Web page: <http://www.neknetwork.com>

Date: Wed, 20 Feb 2002 08:26:15 -0600
From: David Gauding <david.gauding@bbs.galilei.com>
To: qrp-l@lehigh.edu
Subject: [120429] QRP Homebrewer #7
Message-ID: <5.1.0.14.0.20020220081901.00a88310@bbs.galilei.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Good morning,

QRP Homebrewer #7 arrived Saturday and got most of my free time the last

few days.

I thought #6 was the benchmark issue. I was wrong - it is this one - #7.

Thanks N2APB and NJ-QRP and all contributors for putting this fine publication out here for the rest of us. Way to go OM's!

de Dave, NF0R nf0r@slacc.com

Date: Wed, 20 Feb 2002 08:40:11 -0500
From: G Brandon Hoyt <preacher102677@juno.com>
To: qrp-1@Lehigh.EDU
Subject: [120430] Book available!
Message-ID: <20020220.084012.-153125.3.preacher102677@juno.com>
MIME-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: 7bit

Thanks for the prompt replies guys. Apparently the book is still available, and Come next payday or so I should order one.

Lay-TAH!

72's

LIC,

G. Brandon Hoyt -- "Known far and Wide as the Great Pumpkin."

Photographer, Philosopher, Preacher, Pirate, Poet.

"God didn't promise me the sun wouldn't smite me by day" James D. Vernon

DE KG4GVL Clear.

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Date: Wed, 20 Feb 2002 09:57:52 -0500
From: Wes Clopton <W3ERU@DRIX.NET>
To: qrp-1@lehigh.edu
Subject: [120431] conditioning
Message-ID: <5.1.0.14.2.20020220094845.0237b670@66.200.37.131>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Im wondering what the best way is to condition and maintain soldering iron tips. What flux, tinning compound and solder helps keep the tips clean and ready to use?

Wes W3ERU

Date: Wed, 20 Feb 2002 09:18:09 -0600
From: Chuck Carpenter <w5usj@9plus.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [120432] [Mni Tnx] Butternuts and Wind ?s
Message-ID: <3.0.2.32.20020220091809.00836140@mail.9plus.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Thanks to all who replied to the Butternuts and Wind question.

Greatly Appreciated!

I'm sure it was much appreciated by others who also read the replies.

Chuck Carpenter, W5USJ, Point, Rains Co., TX - EM22cv, NETXQRP #1
QRP-ARCI #5422, QRP-L #1306, SOC #57, 6 Club #201, SMIRK #6275
Zombie #759, QRPp-I #115, COG #11, NETXQRP <http://www.netxqrp.org>

Date: Wed, 20 Feb 2002 10:31:27 -0500
From: "Charles Mabbott" <aa8vs@msn.com>
To: W3ERU@DRIX.NET, qrp-l@Lehigh.EDU
Subject: [120433] conditioning - approach
Message-ID: <F297FBihfKf7c3bkNYh0001ea63@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

Used same soldering iron for 20 plus years. Preheat the iron before usage, have damp sponge [or folded washrag] and when heated melt some solder on the tip of the iron. Then with a rolling motion on the damp sponge wipe the tip. It becomes really shiny and provides good heat conduction. Every once in a while use a fine [I mean fine] grade of sand paper and buff it off a bit. Then retin as described above.....

73 oo
Chuck AA8VS

>From: Wes Clopton <W3ERU@DRIX.NET>
>Reply-To: W3ERU@DRIX.NET
>To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
>Subject: conditioning
>Date: Wed, 20 Feb 2002 09:57:52 -0500
>
>Im wondering what the best way is to condition and maintain
>soldering iron tips. What flux, tinning compound and solder helps
>keep the tips clean and ready to use?
>
>Wes W3ERU
>
>

Send and receive Hotmail on your mobile device: <http://mobile.msn.com>

Date: Wed, 20 Feb 2002 15:37:56 +0000
From: Goran Hosinsky <hosinsky@royac.iac.es>
To: qrp-l <qrp-l@lehigh.edu>
Subject: [120434] RE:conditioning - approach
Message-ID: <3C73C2D4.3BDBB959@royac.iac.es>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I am using one of these metal wool things you use
in the kitchen to clean pots and pans. It does not
cool the iron in the way a wet rag does and leaves
it as clean as the rag.
Goran ea8yu

Date: Wed, 20 Feb 2002 11:15:48 -0500
From: David Hinerman <WD8CIV@worldnet.att.net>
To: qrp-l@lehigh.edu
Subject: [120435] Re: conditioning - approach
Message-ID: <5.1.0.14.1.20020220111246.00a75ec0@ipostoffice.worldnet.att.net>
Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"; format=flowed

At 10:31 AM 2/20/2002 -0500, you wrote:

>Used same soldering iron for 20 plus years. Preheat the iron
>before usage, have damp sponge [or folded washrag] and when
>heated melt some solder on the tip of the iron. Then with a
>rolling motion on the damp sponge wipe the tip. It becomes
>really shiny and provides good heat conduction. Every once in
>a while use a fine [I mean fine] grade of sand paper and buff
>it off a bit. Then retin as described above.....

I've found that -damp- is the operative word for the sponge. At work we use soldering stations with built-in sponge trays. If a sponge needs water, I'll put some water in the tray then lay the sponge on top of it. Once the moisture soaks through the top of the sponge has just the right amount.

A drenched sponge allows the hot tip to create so much steam that the sponge itself doesn't actually touch it, so it won't wipe off any oxidation or other crud. A barely damp sponge allows more contact, so the tip cleans better.

As always, your mileage may vary.

Dave

Dave Hinerman
WD8CIV@worldnet.att.net

Date: Wed, 20 Feb 2002 12:07:01 -0500 (EST)
From: George Gingell <k3tks@u1.abs.net>
To: jdam <jdam@psnw.com>
Cc: QRP List <qrp-l@Lehigh.EDU>
Subject: [120436] Re: PVC Mast
Message-ID: <20020220120200.W84354-100000@u1.abs.net>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Yes, Water would be good if I planned to move them, but It would also require a Freeze Plug for the Winter and it would tend to evaporate in the Summer, plus there is the Rust Factor.

Another Good Solution is to Re-Bag the Gravel into Ten Pound Cloth or Plastic Bags and put them in the Barrel for Weight. Still easy enough to

remove for moving.

Thanks for the Suggestion. It only goes to show that there are more than a couple ways to "Skin the Cat" :^}

Sir George, The First :^}

72 ES

QRP DX TU (C) 1986, G. "Danny" Gingell, K3TKS@ abs.net
Former QRP A.R.C.I. Net Manager and Board of Director Member.
Gingell & Company, Ltd. Small Business Telephone Systems
Commercial Locksmith Services (301) 572-6789 Office & Fax
George D. Gingell, Jr. 3052 Fairland Road, Silver Spring, MD 20904-7117
Maryland Milliwatt Club QRP Reference Library, (301) 572-6789 IQRR #1
Maryland Milliwatt Club Founder and Trustee of Club Station - WQ3RP -
Grid Square FM19mb 76.94 W - 39.06 N Silver Spring, MD 20904 QRPea.A.

Collector of Quartz Crystals and Telegraph Keys.

"72" = "Wishing You Good QRP" (C) 1991 Oleg Borodin, RV3GM

Date: Wed, 20 Feb 2002 10:06:37 -0700
From: "Rod N0RC" <rod@n0rc.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [120437] 10m is open for business
Message-ID: <001101c1ba30\$f5ce7770\$6401a8c0@greyrock>
MIME-Version: 1.0
Content-Type: text/plain;
charset="Windows-1252"
Content-Transfer-Encoding: 7bit

If you're lucky enough to be at home today, check out 10m, DX signals everywhere.

I just bagged V51AS & I1YRL. If I can do that with 5W and an attic doublet, imagine what can be done with a "real"(TM) antenna. ;-)

GL

73, Rod N0RC
Ft Collins, CO

Date: Wed, 20 Feb 2002 10:23:25 -0700 (MST)
From: "Paul Harden, NA5N" <na5n@rt66.com>
To: qrp-canada@neale.gpfn.sk.ca, qrp-1@lehigh.edu
Subject: [120438] S-Unit Table/Info
Message-ID: <Pine.SUN.4.10.10202200843110.15311-100000@shell.rt66.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

One S-unit is a change in signal strength POWER of 6dB, or a 3dB change in VOLTAGE, as measured at the receiver antenna terminals.

	VOLT	POWER
S9+20dB	500uV =	- 53dBm
S9+6dB	100uV =	- 67
S9	50uV =	- 73
S8	25uV =	- 79
S7	12.5uV =	- 85
S6	6.2uV =	- 91
S5	3.1uV =	- 97
S4	1.6uV =	-103
S3	.77uV =	-109
S2	.39uV =	-115
S1	.19uV =	-121dBm

An S-METER is calibrated by connecting a signal generator to the antenna terminal and setting the output power to 50uV, or -73dBm, and adjusting the S-meter calibration pot for a reading of S-9. Since the S-meter is usually derived from the receiver AGC line, it *is* relatively linear from about S3-S4 and upward (since a good AGC usually "kicks in" around -100 to -105dBm). This linearity is also due to the diodes used for the AGC detector, once they are conducting in the linear region (again, around S3-S4). Statements that "S-meters are totally worthless" or "a change in 2 S-units means nothing" are thus actually quite incorrect. An S-meter *is* a fairly good RELATIVE power indicator for received signal strengths and noise levels.

SO WHAT-THE-HECK IS AN S-METER GOOD FOR?

The purpose of an S-meter is not to provide any absolute indication of power or voltage, but a RELATIVE indication between received signal strengths ... such as between two different signals, or between a signal and the "noise floor" of the band.

Example: On 40M, typically the "noise" will be S4, or about -103dBm. If your receiver has an MDS (minimum detectable signal) of -133dBm, it means you're losing 30dB of your dynamic range to the noise! ($133-103=30\text{dB}$). In this case, the S-meter is more-or-less giving you an absolute power DIFFERENCE between its MDS and the noise floor, in dB.

Example: A station claims his beam antenna has 12dB gain over his dipole. So he switches between the two and asks you for an "A-B" comparison. His signal goes from S7 to S8 ...a 6dB change. That ain't 12dB! 12dB should have shown 2 S-units of change. (I'm assuming his beam antenna *was* properly pointed at you -hi).

Likewise, YOU are comparing two antennas at your shack. You are LISTENING to a QSO in progress, switching between the two antennas. One antenna causes the S-meter to rise about 1/2 S unit. Well, that's 3dB, and that's not bad for most wire antennas. Or ... you are switching between two antennas and notice that the noise seems to be much less on one, in fact, the S-meter drops from S4 to S3. You have a problem with the antenna with the higher noise. If the noise drops 2 S-units, you have a BIG problem with that antenna! Obviously, you want to use the antenna with the lowest noise, because an S5 signal will be an S5 signal on the same receiver. The difference, is if one antenna has an S4 to S5 noise, you'll be digging that S5 signal "out of the mud." With an antenna at S3 noise level, that S5 signal now has a 2 S-unit (12dB) improvement in signal-to-noise, and will obviously be much easier to work.

An S-meter also makes it convenient to make internal tuning adjustments to your receiver, such as peaking any IF cans, filters, etc. You can tune to a carrier or QSO in the S8 range, then tune above and below and mark the frequency where the S-meter drops 1 S-unit (6dB), 2 S-units (12dB), etc. to make a rough graph of your overall selectivity/filtering of your receiver. If your receiver claims the RF amplifier, when kicked in, provides 12dB of gain, well, you should clearly see about a 2 S-unit change. Or if the 3dB filter BW is 300Hz, then you should clearly see a 1 S-unit change over about twice that, huh? You can do the same with a DVM on your audio output, but an S-meter sure makes it more convenient, and quite easy to verify some of the specs and claims the rig/kit vendor is claiming. Or to check for a change in performance later on for troubleshooting purposes. It is ALWAYS beneficial to do some of these basic measurements when you put a new rig on-line, so you have a baseline to check performance later on if troubles begin. A simple S-meter is all you need to record some of these important specs.

WHAT ABOUT THIS QRO vs QRP THING?

You have to QUADRUPE (X4) your signal to DOUBLE your signal strength at the receiver end. Likewise, if you drop your power by one-fourth, your

received signal strength will be one-half less, or 1 S-unit. You are working a station running 100W and he is S8. If he drops his power to 1/4th, or 25W, his signal strength should drop about 1 S-unit, or to S7. If he drops another 1/4th, to about 6W, he should drop another S unit, or to about S6. Therefore, the difference between 100W and 5W QRP is about 2 S-units. Big deal. Dropping to 1W is about another S-unit, then to 250mW another S-unit, etc. OK, now you're getting down into the S4 noise level on 40M. Now you're hoping the guy on the other end has only a S3 noise level on his end :-)

Hopefully this answers some of the questions raised about S-meters and how to use them.

72, Paul NA5N

Date: Thu, 21 Feb 2002 00:59:40 +0700
From: "Donny Sirait" <dsirait@centrin.net.id>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [120439] Opps Decibels and S units
Message-ID: <000901c1ba38\$616db840\$6bee92ca@donnysirait>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Dear Elmers,

I am well aware of our QRP calculation in S units comparison between ORP and reducing it to max 5 watts.

However as Bruce mentioned that there is a convention about 1 S unit equals to 6 dB, but I could not find it in the ARRL Handbook and other amateur publications about that convention.

The reason for my question is because one can go on debating endlessly because there is no basical agreed theory on a discussion topic and in this case deciBel and S unit.

I would appreciate if someone could lead me to a written publication on this topic which I or us can count on hi hi. I am not asking too much???

Another elmer mentioned that Collins use 100mV for S9 scale on their radio is this standard were used in every radio?? My guess not.

I agree with Bruce to trust more on my ear rather than the meter readings and use that method but in a theory discussion I believe that we have to agree on some standard before we ending up with raised voices hi hi.

vy 73 de YB1B0D
Donny

Date: Wed, 20 Feb 2002 13:00:33 EST
From: K5KW@aol.com
To: qrp-l@lehigh.edu
Subject: [120440] QRP
Message-ID: <111.da3bce2.29a53e41@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Gang,

Paul Hardin, NA5N, has a knack for taking even a most complicated electronic subject and explaining it in the simplest of terms. Wasn't his explanation of the usefulness of the "S" meter a great example? I'm printing it and keeping it for reference.

If you ever get a chance to hear Paul speak at a ham gathering, make every effort to go. Regardless of his chosen topic, you **will** learn something.

We are fortunate to have numerous contributors here on the reflector whose knowledge is priceless. Let's encourage them and let them know that they are appreciated. Without them, this forum might be reduced to one where nothing but insults are swapped, and who wants to watch that?

72,

Don, K5KW
In old Fort Gibson, Oklahoma

Date: Wed, 20 Feb 2002 12:09:36 -0600

From: Chuck Carpenter <w5usj@9plus.net>
To: dsirait@centrin.net.id, qrp-l@lehigh.edu
Subject: [120441] Re: Opps Decibels and S units
Message-ID: <3.0.2.32.20020220120936.0083b6a0@mail.9plus.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Donny,

The message from Paul Harden, S-Unit Table/Info is probably the best you are likely to find.

Unless you know the specific levels used by each manufacturer, the exact dB per S-Unit for a receiver is an unknown.

It's been a defacto estimate over the years to use 6 dB voltage per S-Unit for the signal level shown by an S-meter. Some manufacturer probably did use this level at one time.

The old time pre S-meter technique of RST using your calibrated ears is more trustworthy because it's your judgement about the strength and quality of the signal you hear.

Chuck Carpenter, W5USJ, Point, Rains Co., TX - EM22cv, NETXQRP #1
QRP-ARCI #5422, QRP-L #1306, SOC #57, 6 Club #201, SMIRK #6275
Zombie #759, QRPp-I #115, COG #11, NETXQRP <http://www.netxqrp.org>

Date: Wed, 20 Feb 2002 12:57:35 -0500
From: Steven Weber <kd1jv@moose.ncia.net>
To: qrp-l@lehigh.edu
Subject: [120442] TRF4400 single chip xmitter
Message-ID: <3.0.6.32.20020220125735.007a08f0@mailhost.ncia.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hi Gang,

Yesterday I received a TRF4400 chip made by TI from Digi-Key. This little 24 pin TSSOP chip has built in VCO, prescaler, PLL and DDS used as a variable reference osc for the PLL. The chip is designed to be used as a FSK transmitter in the 433 MHz ISM band and has a specifed range of 420 to 450 MHz and up to 0 dBm output. Effectivly, the DDS is mulitplied by the prescaler, 256 or 512 to produce the final output frequency. The DDS provides 230 Hz tuning steps and allows for quick QSY of the frequency. Best part is the chip only costs \$4.75 in singles! (it's not in the

catalog, you have to look for it on thier web page)

Well, I couldn't wait to try the chip out, so I made a test board I had already laid out and wrote a quick control program to tell it what to do. As far as I could tell from the data sheet, the VCO should work well below what they say is the min frequency, so I set it up so that the VCO is operating at about 100 Mhz and sure enough, it worked! With a /2 on the output, that gives me a signal in the 6M band.

Tuning range is somewhat limited, because of the /2 on the output and the 3.5V supply voltage limits the range of the VCO control voltage. But it looks like I have the beginnings of a neat little 6M rig, probably with a DC receiver. And since the prescaller I'm using on the output of the TRF4400 can be selected to have a /2, 4 or 8 output, making it a dual band 6/10 rig woun't be all that hard to do.

I got to thank John, WB8RCR for tuning me onto this neat part!

72,
Steve, KD1JV
"Melt Solder"
White Mountains of New Hampshire
<http://www.qsl.net/kd1jv/>

Date: Wed, 20 Feb 2002 13:13:13 -0500
From: "V Cortina" <vcortina@hvc.rr.com>
To: <dsirait@centrin.net.id>,
"Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [120443] Re: Opps Decibels and S units
Message-ID: <002b01c1ba3a\$42f97a00\$6401a8c0@hvc.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

OK, this will be my last on the subject.

The 1972 ARRL Handbook does state in two totally different sections, that there has never really been complete buy-in to the 6dB per S-unit concept. S meters are basically meant for relative comparisons. 50uV into 50ohms is generally accepted as S9. But there is also mention how calibrating an S meter in a multi band receiver is especially difficult as receivers exhibit different gain on different bands. Since the S meter is working off agc voltage, calibrating it for one band doesn't necessarily mean it will be on for other bands. Whats the diff anyway? Everybody is 599 in a contest

anyway! Unless they're QRP, then they're 559.
OK, I'm done. Let me have it.

Vinny KR2F
Mt. Tremper, NY FN22ua
F.I.S.T.S. #4582, QRP-L #2397
NJ-QRP #349 E.C.A.R.S. #20188
10-X #68971

----- Original Message -----

From: "Donny Sirait" <dsirait@centrin.net.id>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Wednesday, February 20, 2002 12:59 PM
Subject: Opps Decibels and S units

> Dear Elmers,
>
> I am well aware of our QRP calculation in S units comparison between
> ORP and reducing it to max 5 watts.
>
> However as Bruce mentioned that there is a convention about 1 S unit
> equals to 6 dB, but I could not find it in the ARRL Handbook and other
> amateur publications about that convention.
>
> The reason for my question is because one can go on debating endlessly
> because there is no basical agreed theory on a discussion topic and in
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> case deciBel and S unit.
>
> I would appreciate if someone could lead me to a written publication on
this
> topic which I or us can count on hi hi. I am not asking too much???
>
> Another elmer mentioned that Collins use 100mV for S9 scale on their radio
> is this standard were used in every radio?? My guess not.
>
> I agree with Bruce to trust more on my ear rather than the meter readings
> and
> use that method but in a theory discussion I believe that we have to
agree
> on
> some standard before we ending up with raised voices hi hi.
>
> vy 73 de YB1BOD
> Donny
>

>
>

Date: Wed, 20 Feb 2002 10:19:26 -0800
From: "Doug Hendricks" <ki6ds@dph.dpol.net>
To: <qrp-1@Lehigh.EDU>
Cc: "Paul Harden, NA5N" <na5n@rt66.com>
Subject: [120444] Paul Harden
Message-ID: <019701c1ba3b\$24262140\$4a0b0d0a@dph.dpol.net>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Group, Don has it right. Paul Harden is a National Treasure. I teach and coach (which is all about teaching, only you do your "tests" in public, grin), and Paul Harden is the best teacher I have ever known in my life. I have heard him speak at least a dozen times, and I am in awe of his ability to communicate complicated subject matter to the masses.

The best job that he ever did in my opinion was at Pacificon. He explained nuclear physics to a crowd of general qrpers, and everyone in the crowd was entertained and learned something, and in most cases, a lot. Paul is also a class act, and one of the most giving people I know. He calls it like he sees it, and I value his opinion very, very highly.

There are some who post on this list who I never read anymore. When Paul posts, I always read. He could post on the winter olympics and curling, and I would read it!!

Great job on the S Meter posting Paul. Claimer: Paul Harden is one of my dearest friends. I support him every chance I get, and I am proud to say that I know him and count him among my close friends. He did not pay me to say this, but he probably would loan me ten bucks if I asked nicely, grin.
72, Doug

Date: Wed, 20 Feb 2002 12:24:44 -0600
From: "George, W5YR" <w5yr@att.net>
To: dsirait@centrin.net.id
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [120445] Re: Opps Decibels and S units
Message-ID: <3C73E9EC.4B516387@att.net>

MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Donny, to answer your questions briefly,

1. there is no established "legal" or technical standard for calibrating S meters in amateur radio to which manufacturers adhere.
2. there is no legal or technical definition that says one S unit equals a signal level change of 6 db.
3. in practice no two radios even of the same make and model are likely to have S meters that agree exactly over the entire scale; they may agree at mid-scale (S9) but individual variations tend to make the readings diverge away from that reference point.
4. on almost all amateur receivers, the S meter calibration varies considerably over the full meter range: at the low end, a level change of 2 db might move the meter one "S unit" while at midscale, it might take a 4 - 6 db change for a one S unit change and at the high end a level change of 10 db might make a meter reading change of anywhere from 5 to 25 db.

In other words, in the price and quality range of amateur receivers, even the top of the line \$3-\$4K radios, the S meter is NOT an accurately calibrated and precisely scaled instrument.

Now, a \$30,000 Rhode and Schwarz receiver for the military is a different story. It will have signal level instrumentation that meets whatever specs are required and it will be of laboratory instrumentation calibre. But not our ham rigs . . .

So, for a discussion based upon theory, we are about out of luck with S meters. Different manufacturers use different approaches to designing their metering circuits, even on different models of their own. Sorry, but this is one topic that just doesn't have a common theoretical basis for "all" amateur receivers.

Best advice I think is what others have said: ignore the meter and report signal levels as you perceive them based upon band conditions, other signals, etc. As QRP operators, we frequently work signals that don't raise the S meter above its background noise level, yet we might honestly give a 579 report since all reports are comparative and none of them can be absolute. Everyone has his own notion of what S7 means and sounds like and that is how it is used. And that "standard" varies with time and circumstances even with one operator.

Last evening, the Cub Fox was loudspeaker quality and was moving my Icom

PRO S meter to S9+5-10 db with his keying, against an S4-5 background noise level. QRP signals can be quite strong at times and at other times barely readable in the noise. Relying upon an S meter to determine a signal report can be an exercise in frustration.

72/73/00, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
Amateur Radio W5YR, in the 56th year and it just keeps getting better!
QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

All outgoing email virus-checked by Norton Anti-Virus 2002

Donny Sirait wrote:

> The reason for my question is because one can go on debating endlessly
> because there is no basical agreed theory on a discussion topic and in this
> case deciBel and S unit.
>
> I would appreciate if someone could lead me to a written publication on this
> topic which I or us can count on hi hi. I am not asking too much???
>
> Another elmer mentioned that Collins use 100mV for S9 scale on their radio
> is this standard were used in every radio?? My guess not.

Date: Wed, 20 Feb 2002 11:26:20 -0700
From: "Bruzenak George" <bruzer1@mindspring.com>
To: <vcortina@hvc.rr.com>,
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [120446] Re: Opps Decibels and S units
Message-ID: <000a01c1ba3c\$19615da0\$5da3fc9e@bruzenak55>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Aha! My K1 has a signal strength meter of sorts (really a bar graph) and for me it has always translated as, are you ready?? --- as 559. Now I know why. :-)))
de George, K0CNT
Flying Pig #369, CQC #700, FISTS #8506

----- Original Message -----

From: "V Cortina" <vcortina@hvc.rr.com>

Whats the diff anyway? Everybody is 599 in a contest

> anyway! Unless they're QRP, then they're 559.

> OK, I'm done. Let me have it.

>

> Vinny KR2F

> Mt. Tremper, NY FN22ua

> F.I.S.T.S. #4582, QRP-L #2397

> NJ-QRP #349 E.C.A.R.S. #20188

> 10-X #68971

Date: Wed, 20 Feb 2002 13:47:32 -0500

From: Paul Womble <pwomble1@tampabay.rr.com>

To: FP QRP <fpqrp-1@mpna.com>,

Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>,

Subject: [120447] For Sale: K1 with options

Message-ID: <3C73EF44.B08E08A0@tampabay.rr.com>

MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

Elecraft K1 in excellent condition.

Includes:

K1 with KFL1-4 (40,30,20,15) plus original KFL1-2 (40/20)

KAT1 Internal Auto Tuner

KTS1 Tilt Stand

KBT1 Internal Battery Adapter

Paddlette BP-1 paddle

All with original manuals.

Will ship to your door for \$475 in the U.S. Will ship to DX for actual shipping cost.

Please let me know if you have any questions about this rig. It's a veteran fox/cub/truffle hunter and needs a good home.

73

Paul K4FB

Date: Wed, 20 Feb 2002 10:54:08 -0800
From: "Alan Kaul" <alan.kaul@worldnet.att.net>
To: <na5n@rt66.com>
Cc: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [120448] Re: S-Unit Table/Info
Message-ID: <005101c1ba3f\$fdbe55e0\$af25cd18@charterpipeline.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Wonderful stuff, Paul ... it is probably time that YOU collected your internet musings on everything from propagation/solar cycles/oscilloscopes/s-meters/etc and turned them into a book for "intermediates" (skip the "beginners," and as a marketing ploy you'll capture a bigger audience!)..... i.e. "The Intermediate QRP-er's Guide to Why Things Are..." or similar.

Sell a million of 'em -- you deserve the profits!

Best 72/73 de alan

Alan Kaul, W6RCL, LaCanada, CA
w6rcl@amsat.org
<http://home.att.net/~alan.kaul/index.html>

Date: Wed, 20 Feb 2002 12:37:11 -0700
From: William R Colbert <w5xe@juno.com>
To: qrp-1@lehigh.edu
Subject: [120449] Re: S-Unit Table/Info
Message-ID: <20020220.123712.-363187.1.w5xe@juno.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Alan - I heartily second that motion.

Great stuff Paul.

73

Ray

A penny saved is a government oversight.
Ray Colbert, W5XE, 00TC#3618, SOWP#1064M
NARTE-NCT2R FP# 111, SOC#78,QRP-ARCI 5784,
El Paso,(FAR WEST)TEXAS

Date: Wed, 20 Feb 2002 14:39:32 -0800
From: "W2WU" <w2wurjj@verizon.net>
To: <dsirait@centrin.net.id>, <qrp-1@lehigh.edu>
Subject: [120450] Correction to: Opps Decibels and S units
Message-ID: <001f01c1ba5f\$934f6d00\$71c2fea9@w2wurjj>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Collins 100uV not 100millivolts Please correct table

----- Original Message -----

From: Donny Sirait <dsirait@centrin.net.id>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Sent: 20 February, 2002 09:59
Subject: Opps Decibels and S units

> Dear Elmers,
>
> I am well aware of our QRP calculation in S units comparison between
> ORP and reducing it to max 5 watts.
>
> However as Bruce mentioned that there is a convention about 1 S unit
> equals to 6 dB, but I could not find it in the ARRL Handbook and other
> amateur publications about that convention.
>
> The reason for my question is because one can go on debating endlessly
> because there is no basical agreed theory on a discussion topic and in
> this
> case deciBel and S unit.
>
> I would appreciate if someone could lead me to a written publication on
> this
> topic which I or us can count on hi hi. I am not asking too much???
>
> * Another elmer mentioned that Collins used *100uV* not {100mV for S9}
> scale on their radio
> is this standard were used in every radio? *Corrected Text
My guess not.
>
> I aggree with Bruce to trust more on my ear rather than the meter readings
> and
> use that method but in a theory discussion I believe that we have to
aggree

> on
> some standard before we ending up with raised voices hi hi.
>
> vy 73 de YB1B0D
> Donny
>
>

Date: Wed, 20 Feb 2002 20:12:43 -0000
From: "Tony Fishpool" <tony@g4wif.fsnet.co.uk>
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [120451] Re: S-Unit Table/Info
Message-ID: <009b01c1ba4b\$36081f20\$ea2187d9@duron>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

List members may be interested to know that Paul has been generous enough to allow the GQRP club to publish some of his work as club datasheets which can be freely downloaded from the club site.
Just click on the SPRAT option.

Kind regards
Tony - G4WIF
www.gqrp.com

----- Original Message -----
From: "Alan Kaul" <alan.kaul@worldnet.att.net>

> Wonderful stuff, Paul ... it is probably
> time that YOU collected your internet
> musings on everything from propagation/solar
> cycles/oscilloscopes/s-meters/etc
> and turned them into a book for "intermediates"
> (skip the "beginners," and as a
> marketing ploy you'll capture a bigger audience!).....
> i.e. "The Intermediate
> QRP-er's Guide to Why Things Are..." or similar.
<snip>

Date: Wed, 20 Feb 2002 14:13:58 -0600
From: "Jim NOUR" <n0ur@attbi.com>
To: "QRP-L" <qrp-l@Lehigh.EDU>
Subject: [120452] ARRL DX contest pins
Message-ID: <000901c1ba4b\$21363a00\$19542942@mn.mediaone.net>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

If you like to save "pins" don't forget to order yours if you made 100+ contacts. I always forget till it is too late.

I'm really posting this to see if I am able to post to the list yet, I had to change addresses, so had to re-subscribe.

Hope everyone was able to get on, it was "one to remember!"

72s
Jim NOUR

Date: Wed, 20 Feb 2002 15:22:59 -0500
From: Wes Clopton <W3ERU@DRIX.NET>
To: n0ur@attbi.com
Cc: qrp-l@lehigh.edu
Subject: [120453] Re: ARRL DX contest pins
Message-ID: <5.1.0.14.2.20020220151621.023827b0@66.200.37.131>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 03:13 PM 2/20/02, you wrote:
>If you like to save "pins" don't forget to order yours if you made 100+
>contacts. I always forget till it is too late.

Your post may have upset me Jim. I didn't know about the ARRL DX CONTEST PINS..I WOULD HAVE MADE A HARDER EFFORT.

I just received my 2001 SWEEPSTAKES CW pin. Its a beauty.....

Wes W3ERU

>I'm really posting this to see if I am able to post to the list yet, I had
>to change addresses, so had to re-subscribe.
>
>Hope everyone was able to get on, it was "one to remember!"
>
>72s
>Jim NOUR

Date: Wed, 20 Feb 2002 13:46:18 -0700 (MST)
From: "Paul Harden, NA5N" <na5n@rt66.com>
To: gqrp@onelist.com, qrp-canada@neale.gpfn.sk.ca, qrp-l@lehigh.edu
Subject: [120454] S-Unit Table/Info (fwd)
Message-ID: <Pine.SUN.4.10.10202201324040.16610-1000000@shell.rt66.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Gang,
I am resubmitting the S-Unit post to correct an error in the very first sentence referring to "3dB for voltage." Not sure what I was thinking, other than trying to state that an S-unit is a 6dB change, which corresponds to doubling the received voltage, or quadrupling the power (both are 6dB). Several noted that, and Ken, VE3PU offered the best "rewrite" of the sentence, used below. Thanks.

Thanks to all for the very kind words from the first posting, and a dozen requests to reprint it in their newsletters/websites. Yes, you all have permission to do so, but I do always appreciate when you ask. Though I do recommend you use THIS version :-)

72, Paul NA5N

One S-unit is a change of 6dB in signal strength, which corresponds to double the VOLTAGE or four times the POWER at the receiver input.

HANDY-DANDY S-METER CHART:

	VOLT	POWER

S9+20dB	500uV	= - 53dBm
S9+6dB	100uV	= - 67

S9	50uV = - 73
S8	25uV = - 79
S7	12.5uV = - 85
S6	6.2uV = - 91
S5	3.1uV = - 97
S4	1.6uV = -103
S3	.77uV = -109
S2	.39uV = -115
S1	.19uV = -121dBm

An S-METER is calibrated by connecting a signal generator to the antenna terminal and setting the output power to 50uV, or -73dBm, and adjusting the S-meter calibration pot for a reading of S-9. Since the S-meter is usually derived from the receiver AGC line, it *is* relatively linear from about S3-S4 and upward (since a good AGC usually "kicks in" around -100 to -105dBm). This linearity is also due to the diodes used for the AGC detector, once they are conducting in the linear region (again, around S3-S4). Statements that "S-meters are totally worthless" or "a change in 2 S-units means nothing" are thus actually quite incorrect. An S-meter *is* a fairly good RELATIVE power indicator for received signal strengths and noise levels.

SO WHAT-THE-HECK IS AN S-METER GOOD FOR?

The purpose of an S-meter is not to provide any absolute indication of power or voltage, but a RELATIVE indication between received signal strengths ... such as between two different signals, or between a signal and the "noise floor" of the band.

Example: On 40M, typically the "noise" will be S4, or about -103dBm. If your receiver has an MDS (minimum detectable signal) of -133dBm, it means you're loosing 30dB of your dynamic range to the noise! (133-103=30dB). In this case, the S-meter is more-or-less giving you an absolute power DIFFERENCE between it's MDS and the noise floor, in dB.

Example: A station claims his beam antenna has 12dB gain over his dipole. So he switches between the two and asks you for an "A-B" comparison. His signal goes from S7 to S8 ...a 6dB change. That ain't 12dB! 12dB should have shown 2 S-units of change. (I'm assuming his beam antenna *was* properly pointed at you -hi).

Likewise, YOU are comparing two antennas at your shack. You are LISTENING to a QSO in progress, switching between the two antennas. One antenna causes the S-meter to rise about 1/2 S unit. Well, that's 3dB, and that's not bad for most wire antennas. Or ... you are switching between two antennas and notice that the noise seems to be much less on one,

in fact, the S-meter drops from S4 to S3. You have a problem with the antenna with the higher noise. If the noise drops 2 S-units, you have a BIG problem with that antenna! Obviously, you want to use the antenna with the lowest noise, because an S5 signal will be an S5 signal on the same receiver. The difference, is if one antenna has an S4 to S5 noise, you'll be digging that S5 signal "out of the mud." With an antenna at S3 noise level, that S5 signal now has a 2 S-unit (12dB) improvement in signal-to-noise, and will obviously be much easier to work.

An S-meter also makes it convenient to make internal tuning adjustments to your receiver, such as peaking any IF cans, filters, etc. You can tune to a carrier or QSO in the S8 range, then tune above and below and mark the frequency where the S-meter drops 1 S-unit (6dB), 2 S-units (12dB), etc. to make a rough graph of your overall selectivity/filtering of your receiver. If your receiver claims the RF amplifier, when kicked in, provides 12dB of gain, well, you should clearly see about a 2 S-unit change. Or if the 3dB filter BW is 300Hz, then you should clearly see a 1 S-unit change over about twice that, huh? You can do the same with a DVM on your audio output, but an S-meter sure makes it more convenient, and quite easy to verify some of the specs and claims the rig/kit vendor is claiming. Or to check for a change in performance later on for troubleshooting purposes. It is ALWAYS beneficial to do some of these basic measurements when you put a new rig on-line, so you have a baseline to check performance later on if troubles begin. A simple S-meter is all you need to record some of these important specs.

WHAT ABOUT THIS QRO vs QRP THING?

You have to QUADRUPLE (X4) your signal to DOUBLE your signal strength at the receiver end. Likewise, if you drop your power by one-fourth, your received signal strength will be one-half less, or 1 S-unit. You are working a station running 100W and he is S8. If he drops his power to 1/4th, or 25W, his signal strength should drop about 1 S-unit, or to S7. If he drops another 1/4th, to about 6W, he should drop another S unit, or to about S6. Therefore, the difference between 100W and 5W QRP is about 2 S-units. Big deal. Dropping to 1W is about another S-unit, then to 250mW another S-unit, etc. OK, now you're getting down into the S4 noise level on 40M. Now you're hoping the guy on the other end has only a S3 noise level on his end :-)

Hopefully this answers some of the questions raised about S-meters and how to use them.

72, Paul NA5N

Date: Wed, 20 Feb 2002 12:54:22 -0500
From: "Tracy Markham" <tracy@bytemark.com>
To: "QRP-L" <qrp-l@lehigh.edu>, <WD8CIV@worldnet.att.net>
Subject: [120455] RE: conditioning - approach
Message-ID: <NFBBKLDHALEHCJMAJPKFEEJICLAA.tracy@bytemark.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="Windows-1252"
Content-Transfer-Encoding: 7bit

The shop I used to work at years ago in Orlando had these little cans with a white 'substance' in it that I think was a whipped rosin / ground solder mix. If you stuck the tip of the iron in that it would come out clean as a whistle and nicely tinned. It was amazing how much longer the tinning stayed 'clean' when using that as compared to just melting solder and wiping on a sponge or steel wool.

Water was an absolute no no with the irons in that shop. The owner was a bit eccentric, but he was right on the money that using the stuff in the can would make the tips last much longer. Filing and sanding quickly took the plating off the tips that we used.

Kinda wish I remember what it was called, it came in little black tin cans about the size of a quarter and half an inch tall.

Tracy N4LGH

-----Original Message-----

From: owner-qrp-l@Lehigh.EDU [mailto:owner-qrp-l@Lehigh.EDU] On Behalf Of David Hinerman
Sent: Wednesday, February 20, 2002 11:16 AM
To: Low Power Amateur Radio Discussion
Subject: Re: conditioning - approach

At 10:31 AM 2/20/2002 -0500, you wrote:

>Used same soldering iron for 20 plus years. Preheat the iron
>before usage, have damp sponge [or folded washrag] and when
>heated melt some solder on the tip of the iron. Then with a
>rolling motion on the damp sponge wipe the tip. It becomes
>really shiny and provides good heat conduction. Every once in
>a while use a fine [I mean fine] grade of sand paper and buff
>it off a bit. Then retin as described above.....

I've found that -damp- is the operative word for the sponge. At work we use soldering stations with built-in sponge trays. If a sponge needs water, I'll put some water in the tray then lay the sponge on top of it. Once the moisture soaks through the top of the sponge has just the right amount.

A drenched sponge allows the hot tip to create so much steam that the sponge itself doesn't actually touch it, so it won't wipe off any oxidation or other crud. A barely damp sponge allows more contact, so the tip cleans better.

As always, your mileage may vary.

Dave

Dave Hinerman
WD8CIV@worldnet.att.net

Date: Wed, 20 Feb 2002 14:49:31 -0600
From: Dave Sjolín <sjolin@swbell.net>
To: Qrp-l Reflector <qrp-l@Lehigh.EDU>
Subject: [120456] FOX: PRELIMINARY LOG - CUB FOX NØIT
Message-ID: <3C740BDB.7E7B89DB@swbell.net>
MIME-version: 1.0
Content-type: text/plain; charset=us-ascii
Content-transfer-encoding: 7BIT

Attached is my preliminary log for last nights Cub Fox hunt. Please review and let me know of any corrections. My pencil lead was not very sharp so the log is very messy.

Signals generally were very strong last night but a lot of QRN and after a while about every mode of QRM you can imagine including a five min. tuner upper. (Maybe got too close to FISTS or something). Anyway I was copying okay until I got ssb below as well as above frequency necessitating move to 7049. Hope you all were able to find me there.

Thanks again for a fun hunt. Even though I missed the first ten minutes, I was able to beat my all time best by more than ten pelts. To those I missed, sorry but thanks for trying.

73 de Dave, N0IT

UTC	CALL	MY	RST	STATE	NAME	POWER
0211	W5USJ		559	TX	CHUCK	5W
0212	K5JHP		559	TX	BILL	5W
0213	W5YR	559		TX	GEORGE	5W
0215	WA9TZE		599	WI	JIM	5W
0216	N4MAP		559	GA	SAM	5W
0217	AJ4AY		559	AL	JAY	5W
0218	K0FRP		599	CO	AL	5W
0219	K5SR	559		TX	DALE	5W
0220	VE5RC		559	SK	BRUCE	5W
0220	N8VAR		559	OH	RON	5W

0222	W0CH	579		MO	DAVE	900mw
0223	N9AW	559		WI	JERRY	900mw
0224	AA50	559		LA	VERN	5W
0225	KK5LD		559	TX	DAN	5W
0226	K8KFJ		559	WV	GARY	5W
0227	K9UT	559		IN	JERRY	5W
0229	NK9G	559		WI	RICK	5W
0230	K5DW	559		TX	DON	5W
0231	K4GT	599		GA	JIM	5W
0232	N5ZE	559		TX	LEW	5W

0233	AF4PS		579	FL	MAC	4W
0235	KB9DRT		599	WI	BOB	5W
0235	K8CV	559		MI	WALT	5W
0236	KD5KXF		559	TX	MIKE	5W
0238	K0EVZ		599	ND	DOC	5W
0239	W8YMO		559	OH	HARRY	5W
0240	WA8BXN		559	OH	MIKE	5W
0242	K8DD	539		MI	HENRY	5W
0243	W0IS	589		MN	RICK	5W
0244	WE9K	599		WI	GLENN	5W

0245	WA7LNW		579	UT	JACK	5W
0246	AG0T	599		ND	TODD	350MW
0249	KB0LUR		559	CO	PAUL	4W
0250	VE4WI		559	MB	CRAIG	5W
0252	N4IM	559		TX	COLE	5W
0256	KC1FB/4		559	SC	JIM	5W
0257	AB8DF		559	MI	ED	5W
0258	N9WW	559		IL	JIM	5W
0259	WR50	559		TX	DAVE	5W
0300	W9HL	559		IL	RANDY	5W

0302	N0RC	559		CO	ROD	5W
------	------	-----	--	----	-----	----

0307	VA6RF	559	AB	EARL	5W	
0308	N9NE	559	WI	TODD	25MW	
0311	NX8C	559	MI	NEIL	5W	
0311	K4BYF	559	FL	JACK	5W	
0313	K4ADI	559	FL	FRANK		5W
0316	AF4AT	559	NC	JIM	5W	
0321	KC9LC	559	VA	RANDY		5W
0321	KG4LDY	559	VA	JIM	5W	
0327	K4NK	559	SC	LES	3W	
0328	W5TB	559	TX	DOC	5W	
0330	WB8CAC	569	NC	BOB	2W	
0335	KL7IXI	339	WA	MIKE	4W	
0336	WB6BWZ	579	GA	MATT	5W	
0338	WB8WTU	559	OH	DENNIS		5W
0340	W9XU	559	WI	LON	5W	
0341	WV9N	559	OH	RANDY		5W
0343	K5DI	559	TX	KARL	5W	
0344	AJ9U	559	WI	BOB	5W	
0345	KI0II	559	CO	RON	1W	
0346	N10DL	559	NH	ARON	4W	
0351	KB7WW	559	OR	ART	5W	
0353	KK5LD	559	TX	DAN	5W	DUPE
0354	W9MC	559	WI	MIKE	5W	
0355	NF0R	599	MO	DAVE	50MW	
0359	KI0II	559	CO	RON	200MW	DUPE
0400	N0IT FOX		MO	DAVE	5W	

Date: Wed, 20 Feb 2002 16:00:22 -0500
 From: "KD3PC" <kd3pc@mindspring.com>
 To: <tracy@bytemark.com>,
 "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
 Subject: [120457] Re: conditioning - approach
 Message-ID: <000d01c1ba51\$9db6ba40\$0101a8c4@6545>
 MIME-Version: 1.0
 Content-Type: text/plain;
 charset="Windows-1252"
 Content-Transfer-Encoding: 7bit

We used to use "sal amoniac" and rosin to clean tios but this was way back
 dave

----- Original Message -----

From: "Tracy Markham" <tracy@bytemark.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Wednesday, February 20, 2002 12:54 PM
Subject: RE: conditioning - approach

> The shop I used to work at years ago in Orlando had these little cans with
a
> white 'substance' in it that I think was a whipped rosin / ground solder
> mix. If you stuck the tip of the iron in that it would come out clean as a
>

Date: Wed, 20 Feb 2002 13:21:41 -0800
From: "Bill Jones" <kd7s@psnw.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [120458] Star Studded QST for April
Message-ID: <000501c1ba54\$b03706e0\$3a8b6bd1@j3s0p2>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Congratulations to Dave Benson on his great article, Taming the Trap Dipole
in the most recent QST. Kudos also to Ron Skelton and George Heron on their
article, Enhance Your PSK31 Warbling Experience. It is wonderful to see
more construction articles show up in the mainstream ham magazines.

Oh, and thanks George, for the kind words. My web page took a couple
hundred hits over the weekend.

=====
Bill Jones -- KD7S -- <><
Sanger, California
<http://www.psnw.com/~kd7s>
=====

Date: Wed, 20 Feb 2002 14:57:10 -0700 (MST)
From: "Paul Harden, NA5N" <na5n@rt66.com>
To: qrp-l@lehigh.edu
Cc: CQCLIST@egroups.com
Subject: [120459] Kudo's to CQC/C02KK
Message-ID: <Pine.SUN.4.10.10202201346480.16610-1000000@shell.rt66.com>

MIME-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

Gang,

You really have to give credit when it is due. This weekend, I drove to Denver for the CQC Banquet, featuring Arnie Coro, C02KK. Both were absolutely CLASS ACTS.

CQC has been an aggressive regional QRP club for years, with their strengths mostly with their operating, sponsoring several contests, and publishing the "Low Down." For a small club, they did a fantastic job bringing in Arnie Coro from Cuba. And as we all heard from both parties ... Rich High, W0HEP on the U.S. side, and Arnie from the Cuban side, it was NO small feat dealing with all the bureaucrats on both sides (these guys must get trained at the same school or something!). It was hassle after hassle, literally until minutes before the flight from Cuba left. Even attempting such an aggressive undertaking is short of Herculean. So my biggest ATTABOY to all of CQC for a great banquet, program, and a job well done.

And the second CLASS ACT was clearly Arnie himself. A very intelligent man and a natural born entertainer. He had the nearly 100 people at the banquet in stitches most of the time. A great story teller regardless of the subject. But most important, Arnie is a most OUTSTANDING Ambassador for ham radio and the Cuban people. He is one of the most enthusiastic people for supporting ham radio I have ever heard speak. If you could only have heard the stories of what the Cuban hams go through to get on the air, you'd NEVER make fun of those chirpy signals again. Instead, let it be a reminder that you are QSO'ing one of the world's BEST homebrewer's, and a ham who has worked far harder to get on the air than probably anybody you'll know. Arnie made it clear that some of the items that are virtually non-existent in Cuba for hams are toroids, crystals, most IC's, all but general purpose transistors, tie-wraps, coax, electrical tape, morse code keys, etc.. Everything is made from scratch, wherever they can get it. Examples: Feedlines are made by paralleling 110-ohm telephone lines to make 50 ohms, and with no electrical tape, they are tied together with pieces of old audio tape as if it were lacing cord. Transformers are made from the 4.5MHz IF cans from old Russian TV's ... they know exactly how many turns to remove to get it to resonate at any frequency! And a host of techniques to make their key or paddle.

I predict that when Americans and Cubans are free to associate again, they will be a HUGE resource for homebrewing, and how to build about anything out of nothing. So when you hear that C02 calling CQ, give him a salute of respect. He's a true ham in every sense.

I really enjoyed visiting with many at the banquet, and meeting the other "5-land" fella there ... Walter Dufrain and XYL, who drove in from the

St. Louis, MO area ... driving even farther than me (800 vs 550 miles). And sorry that time ran out and unable to visit with everyone. A bunch of great guys at CQC.

Then attended some hamfest on sunday in North Denver, that I don't have a clue what it was called, but a nice hamfest none-the-less. Arnie's talk there on antennas drew a nice crowd and interest as well. Afterwards, several of us asked Arnie about the "Islander," the most popular circuit in Cuba, with over 500 built from scratch. Arnie drew me the schematic for both the receiver and transmitter (less the double balanced mixer for SSB) for me to redraw. It is an honor to redraw the schematic of this historic radio, and will get it posted on a website somewhere when done, and will probably end up on Arnie's website at Radio Havana Cuba. Arnie sat down and drew the schematic for the entire rig from memory, astounding everyone in attendance! I think he's built more than one of them -hi.

It was a great trip, lots of fun, and always enjoyable meeting the QRPers in the Denver area. Also had lunch with Rod and Jerry in Ft. Collins, in which Rod reports he still needs Delaware :-)

Again, a truly great job to all at CQC for a class act, and giving so many people the unique experience of meeting a truly great ham, and a truly great human being. Arnie is one of a kind.

72, Paul NA5N
CQC #133

Date: Wed, 20 Feb 2002 15:17:18 -0700
From: "Mugleston, Brad" <brad.mugleston@gwl.com>
To: CQCLIST@yahoogroups.com, qrp-l@lehigh.edu
Subject: [120460] RE: [CQCLIST] Kudo's to CQC/C02KK
Message-ID: <F9645092A142D3118CBD00805F15292E1A5B200D@eb-mail1.gwl.com>
MIME-Version: 1.0
Content-Type: text/plain

One of the many things Paul left out (there were way to many things to mention) was HOW there have come to be over 500 islanders built from scratch but the schematics had to be drawn from Arnie's memory.

There isn't an over abundance of paper in Cuba and most meetings are held on-the-air. Imagine building a rig based on a description given to you through the vapor. All you get is a verbal description and you picture it in your head, draw it on the back of anything you can find then build it.

If it doesn't work where do you go - back to YOUR drawing? No, you get on the air and describe what you've done and someone will help you figure out what you did wrong and get you on the air.

Amazing, absolutely amazing.

On top of all that the food was fantastic, all three helpings.

de KI00T, Brad

> -----Original Message-----

> From: Paul Harden, NA5N [SMTP:na5n@rt66.com]

> Sent: Wednesday, February 20, 2002 2:57 PM

> To: qrp-1@lehigh.edu

> Cc: CQCLIST@yahoogroups.com

> Subject: [CQCLIST] Kudo's to CQC/C02KK

>

> Gang,

> You really have to give credit when it is due.

>

> Then attended some hamfest on sunday in North Denver, that I don't have

> a clue what it was called, but a nice hamfest none-the-less. Arnie's

> talk there on antennas drew a nice crowd and interest as well.

> Afterwards, several of us asked Arnie about the "Islander," the most

> popular circuit in Cuba, with over 500 built from scratch. Arnie drew

> me the schematic for both the receiver and transmitter (less the double

> balanced mixer for SSB) for me to redraw. It is an honor to redraw the

> schematic of this historic radio, and will get it posted on a website

> somewhere when done, and will probably end up on Arnie's website at

> Radio Havana Cuba. Arnie sat down and drew the schematic for the

> entire rig from memory, astounding everyone in attendance! I think he's

> built more than one of them -hi.

>

> 72, Paul NA5N

> CQC #133

>

>

>

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Date: Wed, 20 Feb 2002 15:17:40 -0700
From: "Rod N0RC" <rod@n0rc.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [120461] FOX N0RC request [HUMOR]
Message-ID: <000f01c1ba5c\$6994c6c0\$6401a8c0@greyrock>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hey,

How 'bout _ALL_ you hounds setting up in DE tomorrow night. This may increase my chance for bagging this illusive state. ;-)

73, Rod N0RC
Ft Collins, CO

Date: Wed, 20 Feb 2002 16:42:34 -0600
From: "George, W5YR" <w5yr@att.net>
To: tracy@bytemark.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [120462] Re: conditioning - approach
Message-ID: <3C74265A.8ECE9DD8@att.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

That was/is Multicore Tip Cleaner TP-1 - works wonders and costs a fortune for 1/2 oz tin!

My can is silver but the label on top lid is black.

72/73/oo, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
Amateur Radio W5YR, in the 56th year and it just keeps getting better!
QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

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Tracy Markham wrote:

>
> The shop I used to work at years ago in Orlando had these little cans with a
> white 'substance' in it that I think was a whipped rosin / ground solder
> mix.

> Kinda wish I remember what it was called, it came in little black tin cans
> about the size of a quarter and half an inch tall.

Date: Wed, 20 Feb 2002 14:47:28 -0800
From: "Bill Jones" <kd7s@psnw.com>
To: <kd7s@psnw.com>,
"Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [120463] Re: Star Studded QST for April
Message-ID: <000c01c1ba60\$ac01a420\$1f8b6bd1@j3s0p2>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Oops! Did I really say April? Sorry 'bout that.

=====
Bill Jones -- KD7S -- <><
Sanger, California
<http://www.psnw.com/~kd7s>
=====

Date: Wed, 20 Feb 2002 18:15:05 EST
From: N4SKS@cs.com
To: qrp-l@lehigh.edu
Subject: [120464] FS Sierra / tt1340
Message-ID: <da.13f3e55e.29a587f9@cs.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

After playing with the Wilderness Sierra for a while I think I will sell it
and look for something else . It is a great rig , only thing better that i've

tried is a K2. This one is excellant condx. ,comes with 80,40,20,15, 10 meter band units. It has the KC2 front panel with digital readout and keyer etc. Just perfect. Shipped for \$225 conus

Also a Ten Tec 1340 40 meter rig very nice condx. with manual etc. Shipped \$70

thanks Les K4NK

Date: Wed, 20 Feb 2002 18:15:40 -0500 (EST)
From: Chris Cartwright <ccart@phideaux.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [120465] Re: FOX N0RC request [HUMOR]
Message-ID: <Pine.LNX.4.21.0202201811410.5714-100000@dns.phideaux.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Wed, 20 Feb 2002, Rod N0RC wrote:

> How 'bout _ALL_ you hounds setting up in DE tomorrow night. This may
> increase my chance for bagging this illusive state. ;-)

I'm willing to drive down there if it'll make my five watt mobile signal seem any louder :) Maybe I'll see where all that mysterious gain comes from when you're the DX.

Seriously Rod, if you want a sked let me know, will probably hop in the truck and run down there tomorrow night just to see if RF can actually gets out of DE.

-- Chris Cartwright, Unix Administrator | ccart@phideaux.com --
-- N3XRV ARRL-VE Norcal Zombie #163 | Oxford, PA 19363 FM29as --
-- MDmW #5 NJ-QRP #105 QRP-L #655 NORCAL #1891 FISTS #5028 QRP-ARCI #9271 --

Date: Wed, 20 Feb 2002 18:17:53 -0500
From: Bruce Muscolino <w6toy@erols.com>
To: unlisted-recipients;; (no To-header on input)
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [120466] Re: Opps Decibels and S units
Message-ID: <3C742EA1.1CB83CD4@erols.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

Hang,

There were two parts to Donny's original question. One part was about S meters, and the other was about the dB difference between a QRP signal and a QRO signal.

S meters are highly subjective. They vary from manufacturer to manufacturer. Collins Radio set the standard at 6 dB per S unit, as I remember. This sort of became the de facto standard.

BUT S meter readings are only an indication of incoming signal strength. In point of fact, incoming signal strength depends on much more than what your S meter reads! It includes the antenna, the propagation, whether or not you are using AGC, and other things. There is no way the S meter of my Kenwood will give the same reading as your Yaesu except under tightly controlled laboratory conditions!

Now, tables like the one I saw printed here are nice, and do serve as some sort of reference, but they are misleading unless all factors are considered, including how they were made in the first place!

The second part of Donny's questions does have a straight answer. Overtime you double the output power of your transmitter you will see the received signal strength go up 3 dB, under ideal connotations! Again, factors like propagation will enter the equation! 3 dB, it turns out, is the smallest increase in signal level that translates to an change in audible signal strength! You can easily see that the difference between 5 watts and 80 watts is 12 db, 199 watts adds about 1 to 1.5 dB to the equation., Oh, it works both ways, going from 100 watts to 5 watts and the other way around.

73

Date: Wed, 20 Feb 2002 18:32:06 -0500

From: aa3ur@comcast.net

To: w5yr@att.net, Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>

Subject: [120467] Re: conditioning - approach

Message-ID: <00c501c1ba66\$d0174120\$927ba8c0@jamison1.pa.home.com>

MIME-version: 1.0

Content-type: text/plain; charset=iso-8859-1

Content-transfer-encoding: 7BIT

A little sleuthing with Google supplied the following

Multicore tip cleaner TTC1. A British equivalent of a Material Safety Data Sheet for it is here:

<http://www.angliac.co.uk/newbookpdf/solder/multicore%5Fhealth%5Fsafety/ttc1.pdf>

You can order it in the US here:

<http://www.toolseamfg.com/sldclean.htm>

Check out their other soldering tools from their index page

Another place that looks good is

http://www.cs-sales.com/cgi-bin/w3-mysql/New.category_detail.html?cat=SOLDR

I don't know anything about the companies, or about the product except what I've read.

Caveat Emptor.

David Porter AA3UR

aa3ur@comcast.net

----- Original Message -----

From: "George, W5YR" <w5yr@att.net>

To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Sent: Wednesday, February 20, 2002 5:42 PM

Subject: Re: conditioning - approach

> That was/is Multicore Tip Cleaner TP-1 - works wonders and costs a fortune
> for 1/2 oz tin!

> My can is silver but the label on top lid is black.

>

> 72/73/00, George W5YR - the Yellow Rose of Texas

> Fairview, TX 30 mi NE of Dallas in Collin county EM13qe

> Amateur Radio W5YR, in the 56th year and it just keeps getting better!

> QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771

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>

>

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> > white 'substance' in it that I think was a whipped rosin / ground solder

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> > Kinda wish I remember what it was called, it came in little black tin
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> > about the size of a quarter and half an inch tall.
>

End of QRP-L Digest 2472

